

| REPORT DOCUMENTATION PAGE | | | Form Approved OMB No. 0704-0188 | |
|--|---|--|---|--|
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| 1. AGENCY USE ONLY (Leave blank) | | 2. REPORT DATE 24.Sep.02 | | 3. REPORT TYPE AND DATES COVERED THESIS |
| 4. TITLE AND SUBTITLE "SAGEGUARDING NATIONAL SECURITY THROUGHT PUBLIC RELEASE OF ENVIRONMENTAL INFORMATION: MOVING THE DEBATE TO THE NEXT LEVEL" | | | 5. FUNDING NUMBERS | |
| 6. AUTHOR(S) MAJ JACOBSON JOSEPH D | | | | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) GEORGE WASHINGTON UNIVERSITY | | | 8. PERFORMING ORGANIZATION REPORT NUMBER CI02-705 | |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) THE DEPARTMENT OF THE AIR FORCE AFIT/CIA, BLDG 125 2950 P STREET WPAFB OH 45433 | | | 10. SPONSORING/MONITORING AGENCY REPORT NUMBER | |
| 11. SUPPLEMENTARY NOTES | | | | |
| 12a. DISTRIBUTION AVAILABILITY STATEMENT Unlimited distribution In Accordance With AFI 35-205/AFIT Sup 1 | | | 12b. DISTRIBUTION CODE | |
| 13. ABSTRACT (Maximum 200 words) | | | | |
| <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> DISTRIBUTION STATEMENT A Approved for Public Release Distribution Unlimited </div> <div style="font-size: 2em; font-weight: bold;">20021017 087</div> </div> | | | | |
| 14. SUBJECT TERMS | | | 15. NUMBER OF PAGES 95 | |
| | | | 16. PRICE CODE | |
| 17. SECURITY CLASSIFICATION OF REPORT | 18. SECURITY CLASSIFICATION OF THIS PAGE | 19. SECURITY CLASSIFICATION OF ABSTRACT | 20. LIMITATION OF ABSTRACT | |

**SAFEGUARDING NATIONAL SECURITY THOROUGH PUBLIC RELEASE OF
ENVIRONMENTAL INFORMATION:
MOVING THE DEBATE TO THE NEXT LEVEL**

By

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A Thesis submitted to

The Faculty of

The George Washington University
Law School
in partial satisfaction of the requirements
for the degree of Master of Laws

August 31, 2002

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ABSTRACT

SAFEGUARDING NATIONAL SECURITY THOROUGH PUBLIC RELEASE OF ENVIRONMENTAL INFORMATION: MOVING THE DEBATE TO THE NEXT LEVEL

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Joseph David Jacobson

This article first discusses the evolution of community right-to-know laws in the United States, examining the purpose and effectiveness of such laws. It traces the development of such laws, including the Freedom of Information Act, the National Environmental Policy Act, the Emergency Planning and Community Right-To-Know Act, the Clean Air Act, and the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act. The article then focuses on the current state of the law regarding release or withholding of chemical-hazard information and pending legislation in this area of the law. A practical exercise is used to demonstrate that terrorist or criminal organizations can easily access chemical hazard information from non-governmental sources and use it as targeting data regardless of whether such information is released publicly. The article concludes by taking the position that full disclosure of chemical hazard information would enhance national security by allowing communities to prepare for attacks through proper planning and preparation.

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"No nation is permitted to live in ignorance with impunity."

Thomas Jefferson¹

"And therefore I say: 'Know the enemy, know yourself; your victory will never be endangered.'"

Sun Tzu²

I. Introduction

The September 11, 2001 terrorist attacks against the United States have led to reassessments of how national security is impacted through public policy. Law enforcement, intelligence gathering, and immigration policy, for example, have come under intense scrutiny by Congress and the general public, generating a great deal of press coverage.³ Protecting the public from attacks against manufacturers, transporters, and users of dangerous chemicals has generated significantly less interest, though such attacks could have a tremendous impact on public health and welfare.⁴ The issue has

¹ Thomas Jefferson: Virginia Board of Visitors Minutes, 1821. (available at <http://etext.lib.virginia.edu/jefferson/quotations/jeff1350.htm>).

² SUN TZU, THE ART OF WAR 129 (Samuel B. Griffith trans., Oxford University Press Paperback 1971) (1963).

³ *Senate Debate on Chemical Security Widens Party Aisle Into Chasm*, Pesticide and Toxic Chemical News 1, (November 19, 2001)(2001 WL 12774954).

⁴ The Washington Post recently reported on a study by the Army Surgeon General which concluded that as many as 2.4 million people could be killed or injured in a terrorist

generated fierce debate between environmental activists and industry representatives.⁵

The focus of the debate has been on the conflict between dissemination of information to the public and attempting to keep potentially harmful data out of the hands of terrorists.⁶

Environmental activists and other proponents of open government and “community right-to-know” laws argue for the inherent right of the people to be provided with information pertinent to their health and safety.⁷ On the opposite side of the debate, industry groups⁸ and others argue that disclosure of information pertaining to chemical facilities is akin to “painting a giant bull’s-eye”⁹ on such facilities or creating a “Terrorism for Dummies”

attack against a U.S. toxic chemical plant in a densely populated area. Middle-range casualty estimates from such an attack were estimated as high as 903,400 people. The study ranked the threat of attacks against chemical facilities second only to the widespread use of biological weapons. Eric Pianin, *Study Assesses Risk of Attack on Chemical Plant*, The Washington Post, March 12, 2002 at A8.

⁵ See e.g. Ann Davis, *Toxic Cloud: New Alarms Heat Up Debate on Publicizing Chemical Risks*, Wall Street Journal, May 30, 2002, at A1; Angela Logomasini, *Innocent No More; America Can No Longer Be Naive About Security*, The Washington Times, September 27, 2001, at A23.

⁶ See e.g. David Whitman, *A Highly Explosive Mixture: Volatile Chemicals and Gaps in Plant Security May Create a Lethal Combination*, U.S. News & World Report, October 22, 2001, at 31; Jeff Johnson, *The Vanishing Risk Management Plan*, Chemical and Engineering News, February 25, 2002, at 27.

⁷ Stephen Gidiere and Jason Forrester, *Balancing Homeland Security and Freedom of Information*, 16 Natural Resources & The Environment 139 (2002).

⁸ Such groups, notably the American Chemistry Council (formerly known as the Chemical Manufacturers Association) have led the fight against nondisclosure for years. Many corporations subject to disclosure statutes, including Dow Corning, Boeing, and Honeywell, hold significant government contracts.

⁹ Davis, *supra* note 5. This article also notes a 1998 report from the Chemical Manufacturer’s Association (now the American Chemistry Council) which warned of the “dark side of the Internet” and accused the Environmental Protection Agency of allying with “professional environmentalists” to provide “one stop shopping” for terrorists.

handbook.¹⁰ The most controversial disclosure provision involved in this debate has been the Risk Management Program (RMP) found in section 112(r) of the Clean Air Act.¹¹ Because of its controversial nature, section 112(r) is the main focus of this article. At this writing, at least four bills are before the Congress that could either significantly expand or limit information released to the public under the RMP.¹²

By framing the debate in this manner, activists on both sides detract from the central public policy questions at issue: how can the United States best defend chemical facilities from terrorist attack and how can public health consequences be minimized if an attack occurs? Focusing the debate on whether or not to disclose information regarding the effects of attacks on chemical facilities leads policymakers down this country's oft-taken path of totally underestimating the intellectual capabilities, resourcefulness, originality, and determination of terrorist organizations. Underestimating the enemy's capabilities and resourcefulness has led to disastrous results in the past¹³ and will lead to equally tragic results in the event of an effective attack on a chemical facility in a

¹⁰ Nick Nichols, *Tips for Terrorists on Web*, Baltimore Sun, January 24, 2002, at A13.

¹¹ CAA §112(r)(7), 42 U.S.C. §7412 (2000).

¹² These bills include: The Critical Infrastructure Information Security Act of 2001 (S.1456), the Chemical Security Act of 2001 (S.1602), the Community Protection from Chemical Terrorism Act (S.2579), and President Bush's Homeland Security Bill (H.R. 5005).

¹³ History is ripe with examples of this proposition, including the United States' failure to anticipate the Japanese attack on Pearl Harbor, and the mistaken Japanese belief that such an attack would effectively knock the United States out of World War II.

populated area.¹⁴ This article will discuss the evolution of “right-to-know” laws in the United States, explain the current state of the law (focusing primarily on section 112(r) of the Clean Air Act),¹⁵ discuss the reality of how potential terrorists can obtain or calculate chemical worst-case scenarios independent of government disclosure, and argue that potentially affected communities are placed at greater risk through nondisclosure of chemical information. The article concludes that our national security is best served by a policy of full disclosure - if we assume that potential terrorists are intelligent enough to independently calculate targets with the desired destructive impact, we can move the debate (along with money and resources) toward protecting those targets and minimizing the consequences of attack. The article also urges affected industries – especially those with significant government contracting interests - to rethink their traditional opposition to community right-to-know laws and regulations and advocate instead for government assistance in protecting chemical assets.

¹⁴ The Washington Post recently reported that at least 123 plants in the United States keep amounts of toxic chemicals that, if released, could endanger more than 1 million people. Eric Pianin, *supra* note 4. The Blue Plains Wastewater Treatment Plant, located just south of Washington D.C., in 1999 submitted its Risk Management Plan (RMP) to EPA (RMPs will be discussed in detail, *infra*). In the RMP executive summary, the authors described the facility’s “worst case scenario” as a situation in which the rupture of a rail car fully loaded with 90 tons of sulfur dioxide would spread a toxic cloud over a 15-mile radius. (Available from repository@rtk.net. Last visited May 28, 2002).

¹⁵ 42 U.S.C. 7412(r).

II. Evolution of Community Right-to-Know Laws in the United States

A. Purpose and Effectiveness of “Right-to-Know” Approaches

1. Introduction

“Right-to-Know” approaches to environmental protection policy represent a significant step away from the “command and control” regulatory approach that has predominated in the United States since the early 1970s.¹⁶ By the late 1980s, many environmental stakeholders sensed that traditional regulatory approaches had reached a point of diminishing returns,¹⁷ and additional progress could only be made through development of more flexible, effective, and less costly methods of control.¹⁸ These methods, which include, among others, economic approaches and information-disclosure approaches, are designed to supplement in-place regulatory tools, and are an important

¹⁶ See Eric W. Orts, *Reflexive Environmental Law*, 89 Nw. U. L. Rev. 1227 (1995).

¹⁷ Arnold W. Reitze, *A Century of Air Pollution Control Law: What's Worked; What's Failed; What Might Work*, 21 Env'tl. L. 1549 (1991). Professor Reitze wrote, at page 1642: “The federal command-and-control approach has had successes but has run out of steam, and has little chance of dealing effectively with the major air pollution problems that threaten our atmosphere on a global basis. We cannot save the environment just by creating more regulations.”

¹⁸ See, e.g. U.S. EPA, *INNOVATION AT THE ENVIRONMENTAL PROTECTION AGENCY: A DECADE OF PROGRESS* (2000) (EPA 100-R-00-020); Debra S. Knopman, *Easier To Be Green: The Second Generation of Environmental Action*, in *BUILDING THE BRIDGE: 10 BIG IDEAS TO TRANSFORM AMERICA* 163 (Will Marshall ed., 1997); Daniel C. Esty & Marian Chertow, *Thinking Ecologically: An Introduction*, in *THINKING ECOLOGICALLY: THE NEXT GENERATION OF ENVIRONMENTAL POLICY* (Marian R. Chertow & Daniel C. Esty eds., 1997).

component of a comprehensive environmental protection program.¹⁹ Self-monitoring and self-reporting requirements “help assure compliance by the regulated community at a cost to the government far lower than would exist if the regulated community had to be more aggressively controlled.”²⁰

Right-to-know advocates have identified both philosophical and pragmatic arguments in favor of providing free public access to environmental information. Philosophically, supporters see right-to-know as a critical aspect of the right to participate in environmental decision making.²¹ One writer argues that the public has an interest in the environment which competes with all other interests, including industry. “Where there are such competing interests, access to information on the impacts of those interests

¹⁹ See e.g. Robert Stavins & Bradley Whitehead, *Market-Based Environmental Policies*, in ESTY & CHERTOW *supra* note 18 at 109 (including public information disclosure as one of six market-based instruments that will be the next generation alternatives to command-and-control environmental regulation).

²⁰ See Reitze, *supra* note 17 at 457.

²¹ Neil A.F. Popovic, *The Right to Participate in Decisions that Affect the Environment*, 10 Pace Env'tl. L. Rev. 683, 708 (1993) (“public participation in environmental decision-making requires...ready access to government-controlled information”). An important aspect of the government’s responsibilities in releasing “right-to-know” information is, of course, the obligation to release required information in a format that is understandable to the affected public. If the government fails to do so, meaningful public participation may be impossible. For an illustration of how the federal government may be failing in this area, see Thomas J. Gallagher and Wendy S. Jacobson, *The Typography of Environmental Impact Statements: Criteria, Evaluation, and Public Participation*, 17 Env'tl. Mgmt. 99, 107 (1993) (“It is difficult to understand how such documents could be a legitimate part of a required public participation program intended to provide full disclosure.”).

allows decisions to be made taking into account all the relevant factors.”²² This view also enjoys international support. Under the World Charter for Nature,²³ the United Nations General Assembly adopted a resolution stating “[a]ll persons...shall have the opportunity to participate, individually or with others, in the formulation of decisions of direct concern to their environment...”²⁴

In making a pragmatic argument for public access to environmental information, a recent article points out that making such information available to the public ensures environmental problems are addressed.²⁵ The author points out that citizen suit provisions found in environmental statutes turn ordinary citizens into “private attorneys general” because they supplement the enforcement power of government.²⁶ Citizens

²² STUART BELL, BALL & BELL ON ENVIRONMENTAL LAW: THE LAW AND POLICY RELATING TO THE PROTECTION OF THE ENVIRONMENT 161 (4th ed. 1997).

²³ G.A. Res. 37/7, U.N. GAOR, 37th Sess., Supp. No. 51, at 17, U.N. Doc. A/37/51 (1983).

²⁴ *Id.* at 18.

²⁵ William A. Wilcox, Jr., *Access to Environmental Information in the United States and the United Kingdom*, 23 Loy. L. A. Int'l & Comp. L. Rev. 121, 126 (2001).

²⁶ *Id.* at 128. (Quoting Harold Feld, *Saving the Citizen Suit: The Effect of Lujan v. Defenders of Wildlife and the Role of Citizen Suits in Environmental Enforcement*, 19 Colum. J. Envtl. L. 141, 143 (1994). The concept of “private attorneys general” as a supplement to government enforcement programs has parallels in other areas of law as well, including the field of government procurement. *Cf. Scanwell Laboratories, Inc. v. Schaffer*, 424 F.2d 859, 137 U.S. App. D.C. 371 (1970) stating:

Instead of designating the Attorney General, or some other public officer, to bring such proceedings, [referring to cases in which an official is to be prevented from acting in violation of his statutory powers] Congress can constitutionally enact a statute conferring on any non-

bring complaints to court seeking environmental relief and “the government relies on citizens to some extent because the government’s enforcement capabilities are limited and [the EPA] cannot address every single enforcement issue out there.”²⁷ Obviously, without the public availability of adequate environmental information, citizen suits would be virtually impossible to prosecute. Governments would be forced to increase time and resources spent on enforcement. Often, as in the months (and perhaps years) after the terrorist attacks and anthrax incidents, government agencies don’t have the money and resources to adequately enforce even major violations. For example, in a December, 2001 interview, EPA Administrator Whitman explained how her agency had devoted forty of its criminal investigators to the “Ground Zero” investigation and many others to the Capitol Hill anthrax investigation.²⁸ Additionally EPA was involved with

official person, or on a designated group of non-official persons, authority to bring a suit to prevent action by an officer in violation of his statutory powers; for then, in like manner, there is an actual controversy, and there is nothing constitutionally prohibiting Congress from empowering any person, official or not, to institute a proceeding involving such a controversy, *even if the sole purpose is to vindicate the public interest*. Such persons, so authorized, are, so to speak, private Attorney Generals.

Id. at 864. (emphasis added). For more on this subject, including a defense of the private attorney general concept, see Steven L. Schooner, *Fear of Oversight: The Fundamental Failure of Businesslike Government*, 50 Am. U. L. Rev. 627, 681 (2001).

²⁷ Ruth Greenspan Bell, Senior Attorney, Office of General Counsel, EPA, Seminar on Russian Environmental Issues, sponsored by the District of Columbia Bar Association, Washington D.C. (Oct. 10, 1995).

²⁸ Milo Mason, *Interview: Christine Todd Whitman*, 16 Natural Resources and the Environment 200 (2002).

decontamination at both sites.²⁹ The agency was also working with the new Office of Homeland Security on the current crisis, examining a national response system for decontamination and disinfection of biological agents, and coordinating on its assigned counterterrorism duties.³⁰ Not surprisingly, Administrator Whitman described a situation in which “the fiscal and the physical resources [of the EPA] have all been strained.”³¹

Oxford Professor Jeremy Rowan-Robinson has identified five pragmatic benefits derived from liberal access to environmental information.³² He refers to them as follows:

1. Public Reassurance: Access to environmental information will reassure the public and promote confidence in government and industrial action. This proposition is based on the premise that secrecy fuels fear and therefore withdrawal of secrecy promotes public confidence;
2. Personal Responsibility: Information will inform consumer choice, both in the demand for and the consumption of goods. In theory, informed consumers will refuse to buy products that contribute to unacceptable levels of environmental degradation, or limit their use of such products;
3. Industry responsibility: Increased public scrutiny should encourage industries to take environmental protection seriously. Industry has an economic incentive, either because of the threat of citizen suits or consumer activism, to behave in an environmentally responsible manner;

²⁹ *Id.*

³⁰ *Id.* at 202-3.

³¹ *Id.* at 209.

³² Jeremy Rowan-Robinson et al., *Public Access to Environmental Information: A Means to What End?* 8 J. Env'tl. L. 19, 20 (1996).

4. Agency accountability: Knowledge that activities will come under public scrutiny should act as a “vital discipline” for environmental protection agencies, motivating government employees to take their responsibilities seriously;

5. Public participation: Access to information enables members of the public to play a role in policy formulation and decision-making in environmental matters.³³

2. *The Debate Over the Effectiveness of Right-to-Know Provisions*

As right-to-know provisions in environmental and other laws have become more popular, numerous, and onerous, the effectiveness of such statutory components has been strenuously debated. Advocates of such provisions can be found in government, environmental groups, and other public interest organizations. President Bill Clinton was an especially strong advocate of right-to-know legislation, at least publicly. In 1995 he signed Executive Order 12969³⁴ as part of a fierce budget battle between his administration and the Republican-led Congress.³⁵ The E.O. was announced at a highly-

³³ *Id.* (Professor Rowan-Robinson derives these principles, in part, from the Royal Commission on Environmental Pollution, Tenth Report, 1984, Cmnd. 9149, at 38).

³⁴ 60 Fed. Reg. 40989 (1995).

³⁵ Earlier in the year, the Clinton Administration, through the Environmental Protection Agency, added almost 300 chemicals to the Toxic Release Inventory Program of the Emergency Planning and Community Right-to-Know Act (*discussed infra*), bringing the number of reportable chemicals to 651. The Administration also announced plans to add to the list of facilities covered by the program. In response, Congress attempted to counter this expansion through the use of its preferred weapon, the appropriations bill. In July, the House’s appropriations bill for EPA contained 18 riders, including specific prohibitions against EPA’s ability to act, to adopt standards, to enforce environmental laws, and to enforce environmental regulations. One rider specifically would have

publicized signing ceremony in Baltimore attended by 400 local citizens, politicians, environmental groups, and unions. President Clinton, with Vice President Gore and EPA Administrator Browner at his side, criticized the Republican-led Congress for attempting to cut the EPA's budget by thirty-four percent and for attaching to the agency's appropriations bill 18 "loopholes" that would interfere with EPA's implementation and enforcement of current regulations.³⁶ He then explained the E.O. by saying, "I signed an executive order which says any manufacturer who wants to do business with the federal government must tell its neighbors what dangerous chemicals it puts into the air, the earth, and the water."³⁷ He also further fanned the flames by announcing, "[t]he message here is clear. The Congress can go right along with its plan to undermine America's anti-pollution laws, but it will go nowhere fast. Community right-to-know is here to stay."³⁸ This move by President Clinton was not surprising given his often-stated approval of the EPCRA and its reporting requirements. In fact, later in his speech at the E.O. signing ceremony in Baltimore, President Clinton credited these "power to the people" statutes with reducing toxic chemical releases in the city by

limited EPA's ability to add chemicals and facilities covered by the TRI. (*See Clinton Directs Continued Toxic Reporting Standards for Contractors*, 37 No. 31 Gov't Contractor P432)). A writer for the Bureau of National Affairs referred to the situation as "[T]he attempt in Congress to dismantle environmental laws through the appropriations process." (*See Government Reporters Must Report to TRI Under Order Signed by Clinton*, 26 Env't Rep. (BNA) 687 (August 11, 1995)).

³⁶ *Government Reporters Must Report to TRI Under Order Signed by Clinton*, *supra* note 35.

³⁷ *Id.*

³⁸ *Id.*

seventy-four percent between 1986 and 1995, and nationwide by forty-three percent over the same time period.³⁹ At least one writer has held up the program as a model statute for use in combating pollution in the states of the former Soviet Union, citing E.O. 12969 as an indicator of President Clinton's strong belief in the effectiveness of community right-to-know.⁴⁰

The EPA, during the Clinton Administration, was a strong supporter of right-to-know programs as well. In 1997 the agency declared expanded public environmental information disclosure as one of ten strategic, long-term goals. EPA declared such disclosure furthered its mission to protect human health and the environment.⁴¹ Based on recent removals of information from its websites, some question whether the agency still holds the same position.⁴²

Citizen group support comes from a variety of interest groups. The U.S. Public Interest Research Group, OMB Watch and Greenpeace are a few of the more vocal groups on the issue. Jeremiah Baumann of the U.S. Public Interest Research Group recently testified before a congressional committee that informing the public regarding chemical dangers leads to hazard reduction through changes in materials, processes and

³⁹ *Id.*

⁴⁰ Katherine M. Harman-Stokes, *Community Right-To-Know in the Newly Independent States of the Soviet Union: Ending the Culture of Secrecy Surrounding the Environmental Crisis*, 15 *Va. Envtl. L.J.* 77, 123 (1995).

⁴¹ See U.S. EPA, EPA STRATEGIC PLAN 17 (EPA 190-R-97-002) (1997).

⁴² See generally, *supra* note 6.

storage used by industry.⁴³ Mr. Baumann pointed out that in New Jersey these types of changes led to, for example “the number of chemical plants using hazardous amounts of chlorine gas, notorious for its involvement in accidental releases that threaten neighboring communities, dropping from 575 companies in 1988 to twenty-two in September [2001].”⁴⁴ He also observed that in Washington D.C. the city’s Blue Plains Sewage Treatment Plant is switching from chlorine gas to less volatile sodium hypochlorite, which has far less potential for airborne offsite impact.⁴⁵ Finally, Mr. Bauman stresses the need for communities to be aware of chemical dangers that could affect them by pointing out that there are “still nearly 5,000 facilities in the U.S. storing greater quantities of hazardous chemicals than were released in the 1984 Bhopal, India, chemical release that spurred the nation’s first right-to-know programs.”⁴⁶

The harshest criticisms of information release provisions often come from affected industry and conservative public interest groups, but a number of prominent politicians have also made it apparent that they may not be in full support of such programs. For example, as governor of New Jersey, EPA Administrator Whitman removed more than

⁴³ TESTIMONY OF JEREMIAH D. BAUMANN BEFORE THE HOUSE OF REPRESENTATIVES COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON WATER RESOURCES AND THE ENVIRONMENT, November 8, 2001 (2001 WL 26187661).

⁴⁴ *Id.*

⁴⁵ *Id.* Mr. Baumann apparently credits this process change to public pressure as well, but it should be pointed out that this was no quick fix. Neighbors of Blue Plains, including nearby Bolling Air Force Base, had complained for years about the potential danger. Only after the September 11 attacks did the facility begin its transition to sodium hypochlorite. *See*, Whitman, *supra* note 6.

⁴⁶ *Id.*

1,000 hazardous chemicals from the state's right-to-know inspection list, once considered the toughest in the nation.⁴⁷ President Bush, when governor of Texas, signed the state's Audit Privilege Act (known to critics as the "polluters' immunity law"), reducing government inspections and penalties for companies that conducted their own internal audits, which are treated as privileged and confidential information.⁴⁸ Angela Logomasini, spokesperson for the Competitive Enterprise Institute recently called for the elimination of the Clean Air Act's Risk Management Program,⁴⁹ claiming such programs are "only useful to groups that want to scare the public about chemical risks, or those who might use it for selecting targets."⁵⁰ The American Chemistry Council has historically been opposed to right-to-know programs, often on grounds of protecting confidential business information, but more recently voicing concerns about terrorist threats to industrial facilities.⁵¹

In recent years, academic interest in the use of information disclosure as a regulatory tool to affect environmentally related behavior by firms has greatly increased.⁵² Many disciplines, including ecology, engineering, political science,

⁴⁷ Charlie Cray, *A Regulatory Accident in the Making*, 22 *Multinational Monitor* (2001 WL 15520507) (May 1, 2001). Compare this with Mr. Baumann's testimony, *supra*.

⁴⁸ *Id.*

⁴⁹ CAA §112(r)(7), 42 U.S.C. §7412(r). Discussed in detail *infra*.

⁵⁰ John Dodge, *Chemical Risk Information Law Debated*, *The Olympian*, October 14, 2001, at A1.

⁵¹ See e.g. Davis, *supra* note 5.

⁵² David W. Case, *The Law and Economics of Environmental Information as Regulation*, 31 *Env'tl. L. Rep.* 10773 (July, 2001).

psychology, philosophy, law, and economics, are involved in the debate surrounding this issue.⁵³ One author points out, however, that economic principles may facilitate greater understanding of complex environmental regulatory policy issues, and economic arguments are “often more powerful than moral persuasion alone and bring important weapons into play for use in protecting the environment.”⁵⁴ The author reviews empirical studies that focused on the economic effectiveness of information disclosure statutes. While admitting that the literature on the subject is “young”⁵⁵ and the empirical research

⁵³ *Id.*

⁵⁴ *Id.* Mr. Case points out that the foundations of economic approaches include “assessing the economic importance of environmental degradation, identifying economic causes of environmental degradation, and designing economic incentives to slow, stop, or reverse such degradation.” Quoting KERRY TURNER ET. AL., ENVIRONMENTAL ECONOMICS: AN ELEMENTARY INTRODUCTION vii-viii (1993). Mr. Case goes on to argue:

Thus, in seeking to develop alternative policy tools within the legal infrastructure to supplement or replace traditional environmental regulatory approaches, economic theory and method can be highly useful in evaluating or improving upon any such proposed instruments. This is not to say, however, that contributions of environmental economics to the collective choice problem posed by societal interaction with the natural environment are of greater importance than contributions of other relevant disciplines. Economic analysis is merely one important tool in the collective—inevitably political—decisionmaking process; a tool most helpful when fully integrated with insights gleaned from other relevant disciplines and approaches applicable to complex environmental regulatory problems. (referencing various sources).

⁵⁵ *Id.*

performed to date is “sketchy and incomplete,”⁵⁶ he finds that “both economic theory and empirical evidence produced to date suggest that informational regulatory strategies can effectively motivate environmental performance improvement even in the absence of traditional regulatory controls.”⁵⁷ In reviewing the available research, the author finds support for the following propositions:

- Provision of environmental information can effectively produce improvements to the environmental status quo even in the absence of other regulation;⁵⁸
- The Toxic Release Inventory Program (TRI Program) found in the Emergency Planning and Community Right to Know Act functions as a conduit of environmental information to economic markets;⁵⁹
- Pressures brought to bear by economic markets following information disclosure can induce firms to improve their environmental performance;⁶⁰
- Losses in corporate market value triggered by information disclosure induced firms to engage in behavior with a net environmental benefit to society, even if it did not lead them to reduce toxic chemical use or creation in their processes;⁶¹
- Relying on market pressures...and public pressure to enforce environmental standards replaces regulators with thousands of unpaid, proactive enforcers in

⁵⁶ *Id.*

⁵⁷ *Id.*, quoting Tom Tietenberg, *Disclosure Strategies for Pollution Control*, 11 *Envtl. & Resource Econ.* 587, 587-88 (1988).

⁵⁸ See Peter W. Kennedy et al., *Pollution Policy: The Role for Publicly Provided Information*, 26 *J. Env'tl. Econ. & Mgmt.* 31 (1994).

⁵⁹ See James T. Hamilton, *Pollution as News: Media and Stock Market Reactions to the Toxics Release Inventory Data*, 28 *J. Env'tl. Econ. & Mgmt.* 98 (1995).

⁶⁰ See Shameek Konar & Mark A. Cohen, *Information as Regulation: The Effect of Community Right-To-Know Law on Toxic Emissions*, 32 *J. Env'tl. Econ. & Mgmt.* 109 (1997).

⁶¹ See Madhu Khanna et al., *Toxics Release Information: A Policy Tool for Environmental Protection*, 36 *J. Env'tl. Econ. & Mgmt.* 243 (1998).

society. However, for informational regulation to realize this potential, reliable information about firms' environmental operations and performance is essential.⁶²

The author also conducted a review of legal literature on informational regulation, and found support for the proposition that these programs are a useful complement to command-and-control approaches.⁶³ He cautioned, however, that literature on the subject from the legal field is in its "infancy" and heavily influenced by earlier economic studies with little reliance on other disciplines.⁶⁴ Some of the advantages of information disclosure programs noted by legal scholars include:

- Reduced regulatory costs;⁶⁵
- Greater flexibility in achieving regulatory ends and means;⁶⁶
- Democracy-enhancing citizen oversight capabilities that are largely self-enforcing;⁶⁷

⁶² Paul R. Kleindorfer & Eric W. Orts, *Informational Regulation of Environmental Risks*, 18 Risk Analysis 155, 162 (1998).

⁶³ *Supra* note 52. See, e.g. Cass R. Sunstein, *Informational Regulation and Informational Standing: Akins and Beyond*, 147 U. Pa. L. Rev. 613 (1999); William M. Sage, *Regulation Through Information: Disclosure Laws and American Health Care*, 99 Colum. L. Rev. 1701 (1999); William F. Pederson, *Regulation and Information Disclosure: Parallel Universes and Beyond*, 25 Harv. Env. L. Rev. 151 (2001); Bradley C. Karkkainen, *Information as Environmental Regulation: TRI and Performance Benchmarking, Precursor to a New Paradigm?*, 89 Geo. L.J. 257 (2001); Richard B. Stewart, *A New Generation of Environmental Regulation?*, 29 Cap. U. L. Rev. 21 (2001); Mark A. Cohen, *Information as a Policy Instrument in Protecting the Environment: What Have We Learned?* 31 E.L.R. 10425 (Apr. 2001).

⁶⁴ *Id.*

⁶⁵ Sunstein, *supra* note 63.

⁶⁶ *Id.*

⁶⁷ *Id.* Sunstein also cautioned, however, that information strategies can be inferior to conventional regulatory approaches in that (1) they can impose significant costs on a

- Stimulation of information generation and overcoming barriers to information sharing;⁶⁸
- Enabling and reinforcing principles of representative democracy by assisting society in “bringing difficult decisions into the open and providing the deliberative process with the information needed to resolve them;”⁶⁹
- Could provide a foundation for substantive and targeted change in the regulatory system;⁷⁰
- May lead to “the emergence of a performance-based approach to environmental regulation” significantly superior to conventional regulatory strategies;⁷¹
- A useful complement to both market-based and command-and-control regulatory approaches.⁷²

Researchers in this area, while often optimistic about the promise of information disclosure in the field of environmental law, generally acknowledge that the literature on the topic is not especially well developed. The only significant data available at the present time comes from the EPCRA’s TRI program, and writers caution that lessons learned from TRI may not be directly transferable to information-based regimes in general. For example, Professor Cohen writes:

targeted regulated community and (2) information can sometimes be ineffectual or counter productive if not presented in a clear and usable form.

⁶⁸ Sage, *supra* note 63.

⁶⁹ *Id.* at 1803.

⁷⁰ Pederson, *supra* note 63.

⁷¹ Karkkainen, *supra* note 63 at 262.

⁷² Stewart *supra* note 63.

The limited empirical evidence to date regarding the TRI does not satisfactorily sort out the relative contributions of multiple attempts to forestall additional regulation, and internalization of normative environmental and social values—to improved environmental performance. Thus, policymakers cannot assume that other information disclosure programs will be successful simply because of past positive experiences with the TRI.⁷³

In summary, the debate over the effectiveness of right-to-know provisions in environmental statutes involves many groups and individuals with interests ranging from academic curiosity to economic necessity to national security. The debate is sure to grow as the full implications of the growing database of information submitted by affected industry are realized. A relatively new element that is quickly forcing itself into the debate is the Internet, which increases public accessibility to environmental information. This access has the potential to shift the traditional balances of power among competing interests in the area of environmental regulation. It remains to be seen to what extent various groups will take advantage of the increased information gathering, networking, and public participation opportunities offered by the ever-expanding and increasingly user-friendly Internet.⁷⁴ When all of these factors are combined with the now almost all-consuming angst over prevention of terrorist attacks, the debate over information disclosure approaches to environmental regulation is sure to become increasingly heated.

⁷³ Cohen, *supra* note 63 at 10426.

⁷⁴ See, generally, Keith Harley & Holly D. Gordon, *Public Participation and Environmental Advocacy in the Internet Era*, 16-SUM Nat. Resources & Env't 296 (2001). The authors list a variety of websites helpful for acquiring both factual and legal information on environmental issues.

3. *The Freedom of Information Act*

Whether Congress and the American people were motivated by philosophical or pragmatic justifications is open for discussion, but the right-to-know movement clearly enjoyed its first political success in 1966. The Freedom of Information Act of 1966 (FOIA)⁷⁵ was not an environmental statute, but a broader effort which established for the first time an effective statutory right of access to government information.⁷⁶ The FOIA was signed into law by President Johnson as an amendment to the Administrative Procedure Act (APA)⁷⁷ which had fallen short of its public disclosure goals and was considered to be more of a government withholding tool than a disclosure statute.⁷⁸ In his statement accompanying the FOIA signing, President Johnson said he signed the legislation “with a deep sense of pride that the United States is an open society in which the people’s right to know is cherished and guarded.”⁷⁹ He went on to say “This legislation springs from one of our most essential principles: A democracy works best when the people have all the information that the security of the Nation permits. No one should be able to pull curtains of secrecy around decisions which can be revealed without

⁷⁵ Pub. L. No. 89-487 (1966).

⁷⁶ U.S. DEP’T OF JUSTICE, FREEDOM OF INFORMATION ACT GUIDE & PRIVACY ACT OVERVIEW 5 (May 2000). (Hereinafter FOIA Guide).

⁷⁷ 5 U.S.C. §1002 (1964) (amended 1966 and now codified at 5 U.S.C. §552).

⁷⁸ *Supra*, note 28 (paraphrasing S. Rep. No. 89-813, at 5 (1965)).

⁷⁹ STATEMENT BY THE PRESIDENT UPON SIGNING THE “FREEDOM OF INFORMATION ACT” 316 Pub. Papers 699 (July 4, 1966).

injury to the public interest.”⁸⁰ These sentiments still enjoyed Presidential support twenty-seven years later when President Clinton made his FOIA policy statement, referring to the statute as a vital mechanism of government openness and accountability and observing:

For more than a quarter century now, the Freedom of Information Act has played a unique role in strengthening our democratic form of government. The statute was enacted based upon the fundamental principle that an informed citizenry is essential to the democratic process and that the more the American people know about their government the better they will be governed. Openness in government is essential to accountability and the Act has become an integral part of that process.⁸¹

The FOIA in particular, and the concept of the public’s right to be informed, also has enjoyed support from the U.S. Supreme Court. In 1978 the Court explained that “[T]he basic purpose of [the] FOIA is to ensure an informed citizenry, vital to the functioning of a democratic society, needed to check against corruption and to hold the governors accountable to the governed.”⁸² The Court also has emphasized that “[o]fficial information that sheds light on an agency’s performance of its statutory duties falls squarely within that statutory purpose.”⁸³

⁸⁰ *Id.*

⁸¹ President’s Memorandum for Heads of Departments and Agencies regarding the Freedom of Information Act, 29 Weekly Comp. Pres. Doc. 1999 (Oct. 4, 1993).

⁸² NLRB v. Robbins Tire & Rubber Co., 437 U.S. 214, 242 (1978).

⁸³ United States Dep’t of Justice v. Reporters Comm. For Freedom of the Press, 489 U.S. 749, 773 (1989).

The FOIA has been amended several times since its inception, with Congress enacting both procedural and substantive reforms to the statute.⁸⁴ Most recently, Congress enacted the Electronic Freedom of Information Act Amendments of 1996,⁸⁵ bringing the FOIA into the Internet age. Among other adjustments, these amendments addressed the subject of electronic records and created “electronic reading rooms” to supplement the already-existing physical reading rooms maintained by agencies.⁸⁶ This reading room provision also modified the requirements of Section 552(a)(2) of the FOIA by requiring agencies to add to their reading rooms any records processed and disclosed in response to a FOIA request that “the agency determines have become or are likely to become the subject of subsequent requests for substantially the same records.”⁸⁷

Provisions of the FOIA which are particularly relevant to the topic of this article will be discussed in a later section, but the principal thrust of the Act is toward disclosure.

⁸⁴ Substantial amendments to the FOIA occurred in 1974 (scope of law enforcement and national security exemptions narrowed, many procedural provisions broadened); in 1976 (narrowed FOIA’s incorporation of the disclosure provisions of other statutes); in 1986 (Freedom of Information Reform Act, Pub. L. 99-570, 100 Stat. 3207, broadened law enforcement information exemption, added law enforcement record exclusions, created new fee and fee waiver structure); and 1996 (Electronic Freedom of Information Amendments of 1996, discussed *infra*).

⁸⁵ Pub. L. No. 104-231, 110 Stat. 3048.

⁸⁶ *Id.*

⁸⁷ 5 U.S.C. §552(a)(2)(D). This provision requires an agency to determine, when responding to a FOIA request, whether the records to be disclosed have become the subject of subsequent FOIA requests or, are likely to become subject to multiple requests in the future. But, according to FOIA Update Vol. XVIII, No. 2, at 2, agencies need not include records processed for contemporaneous multiple requests if they are not likely to be requested again (e.g. certain types of government contract submissions). For more on this subject see, generally, FREEDOM OF INFORMATION ACT GUIDE AND PRIVACY ACT OVERVIEW, *supra* note 76.

Virtually every record possessed by a government agency is releasable unless it is specifically exempted from disclosure or specifically excluded from the Act's coverage.⁸⁸ Justification for nondisclosure is usually found in the nine exemptions found in the FOIA, and even then nondisclosure is generally discretionary, not mandatory.⁸⁹

⁸⁸ *Supra* note 76. (Paraphrasing NLRB v. Sears, Roebuck & Co., 421 U.S. 132, 136 (1975)). In the Department of Defense, the FOIA is implemented through the Defense Federal Acquisition Regulations Supplement (DFARS), 48 C.F.R. 2 C.C.H. Volume 5, Subpart 224.2, Department of Defense Directive 5400.7 *DoD Freedom of Information Act Program*, and Department of Defense Regulation 5400.7-R, *DoD Freedom of Information Act Program*. The DFARS does not require the disclosure of contract proposal information.

⁸⁹ The nine FOIA exemptions are:

1. Records properly and currently classified in the interest of national defense or foreign policy, as specifically authorized under the criteria established by Executive Order and implemented by regulations. 5 U.S.C. 552 (b)(1);
2. Records related solely to the internal personnel rules and practices of an agency. 5 U.S.C. 552 (b)(2). These records include internal matters of a relatively trivial nature (a.k.a. "low 2" information) and more substantial matters, the disclosure of which would risk circumvention of a legal requirement (a.k.a. "high 2" information);
3. Records concerning matters that a statute specifically exempts from disclosure by terms that permit no discretion by the agency or establishes particular criteria for withholding or refers to particular types of materials to be withheld. 5 U.S.C. 552 (b)(3);
4. Records containing trade secrets and commercial or financial information obtained from a person [that is] privileged or confidential. 5 U.S.C. 552 (b)(4);
5. Inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency. 5 U.S.C. 552

(b)(5); This language has been interpreted by the courts to exempt those documents that are normally privileged in the civil discovery context. See NLRB v. Sears, Roebuck & Co., 421 U.S. 132, 149 (1975); FTC v. Grolier, Inc., 461 U.S. 19,26 (1983); Martin v. Office of Special Counsel 819 F.2d 1181, 1184 (D.C. Cir. 1987).

6. Personnel and medical files and similar files when the disclosure of such information would constitute a clearly unwarranted invasion of personal privacy. 5 U.S.C. 552 (b)(6);

7. Records or information compiled for law enforcement purposes, but only to the extent that the production of such law enforcement records or information A) could reasonably be expected to interfere with enforcement proceedings, (B) would deprive a person of a right to a fair trial or an impartial adjudication, (C) could reasonably be expected to constitute an unwarranted invasion of personal privacy, (D) could reasonably be expected to disclose the identity of a confidential source, (E) would disclose techniques and procedures for law enforcement investigations or prosecutions, or would disclose guidelines for law enforcement investigations or prosecutions if such disclosure could reasonably be expected to risk circumvention of the law, or (F) could reasonably be expected to endanger the life or physical safety of any individual. 5 U.S.C. 552 (b)(7)(A-F);

8. Records containing matters that are contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions. 5 U.S.C. 552 (b)(8);

9. Geological and geophysical information and data, including maps, concerning wells. 5 U.S.C. 552 (b)(9).

4. The National Environmental Policy Act

Although some might argue that the National Environmental Policy Act (NEPA)⁹⁰ was the first environmental right-to-know statute, it does not clearly fit into the category. NEPA is more accurately categorized as a planning statute for the federal government, setting forth procedural rules agencies must follow before undertaking “major federal actions significantly affecting the quality of the human environment.”⁹¹ Before beginning any such project, the agency must prepare a detailed statement (termed an Environmental Impact Statement or “EIS”) on:

- i. the environmental impact of the proposed action;
- ii. any adverse environmental effects which cannot be avoided should the proposal be implemented;
- iii. alternatives to the proposed action;
- iv. the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and;
- v. any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.⁹²

Public participation is an integral part of the NEPA framework both during and after development of the EIS. NEPA regulations state that one of the goals of the statute is to “encourage and facilitate public involvement in decisions which affect the quality of

⁹⁰ 42 U.S.C. §§4321-4370(e) (1969).

⁹¹ *Id.* at §4332(c)

⁹² *Id.*

the human environment.”⁹³ So while NEPA was certainly a groundbreaking statute in the broad public “right-to-participate” sense, it doesn’t clearly fit into the narrower “right-to-know” category which is more often thought of as a scheme in which polluters are required to disclose their processes and other information.⁹⁴ The first true right-to-know provision in a substantive environmental statute would not become law until 1986.

B. The Emergency Planning and Community Right to Know Act

1. The Toxic Release Inventory Program

Between 1980 and 1985, releases of toxic chemicals caused 135 deaths and nearly 1500 injuries in the United States.⁹⁵ On December 4, 1984, a Union Carbide plant in Bhopal, India released methyl isocyanate, killing 2500 people and injuring approximately 200,000. Eight months later, a hazardous chemical release from a plant in Institute, West Virginia injured 135 people.⁹⁶ Congress responded to the public’s growing concern about the safety of the chemical industry by passing The Emergency Planning and Community Right-To-Know Act (EPCRA)⁹⁷ as Title III of the Superfund Amendments

⁹³ 40 C.F.R. §1500.1 (1999).

⁹⁴ *See generally, supra* note 17.

⁹⁵ Sidney M. Wolf, *Fear and Loathing About the Public Right to Know: The Surprising Success of the Emergency Planning and Community Right-To-Know Act*, 11 J. Land Use & Envtl. L. 217 (1996).

⁹⁶ *Benefits of Chemical Information Should Not Be Forgotten*, OMB Watch Executive Report, January 16, 2002. (available at <http://www.ombwatch.org>).

⁹⁷ 42 U.S.C. 11001-11050 (2000).

and Reauthorization Act of 1986.⁹⁸ Often analogized to a chemical Freedom of Information Act⁹⁹ for the private sector, EPCRA was the first of several statutes to promote the idea that communities have an “inherent right”¹⁰⁰ to be made aware of environmental hazards which may affect them. Other significant programs include section 112(r) of the Clean Air Act (discussed *infra*) and the Consumer Confidence Reports program under the Safe Drinking Water Act Amendments of 1996¹⁰¹.

Arguably the most groundbreaking aspect of EPCRA was its Toxic Release Inventory (TRI) program found in section 313.¹⁰² EPCRA section 313 requires the owners and operators of certain manufacturing facilities to annually submit to the Environmental Protection Agency (EPA) and designated state officials toxic chemical release inventory forms (“Form Rs”) for listed chemicals. Information collected under this provision is known as a facility’s Toxic Release Inventory (TRI)¹⁰³ and is used to inform the public of chemical releases by industry. Currently, approximately 650 toxic chemicals and twenty-two chemical categories are covered by section 313¹⁰⁴. A facility

⁹⁸ Pub. L. No. 99-499, §§399-330, 100 Stat. 1613 1728-58 (1986).

⁹⁹ See ARNOLD W. REITZE, JR., AIR POLLUTION CONTROL LAW: COMPLIANCE AND ENFORCEMENT, Environmental Law Institute, (2001), at 172.

¹⁰⁰ See generally Wilcox, *supra* note 25.

¹⁰¹ 42 U.S.C. §300g-3(c)(4)

¹⁰² EPCRA §313. 42 U.S.C. §11023

¹⁰³ Thus, the §313 program is often referred to as the “TRI Program.”

¹⁰⁴ U.S. EPA, THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT 1 (2000) (EPA 550-F-00-004).

that exceeds the threshold of manufacturing 25,000 pounds per year or using 10,000 pounds per year¹⁰⁵ of a listed chemical is required to submit a Form R for each such chemical annually by July 1. A facility is subject to section 313 if it has ten or more employees, is in Standard Industrial Classification (SIC) code 20-39,¹⁰⁶ and manufactured (including imported), processed, or otherwise used a toxic chemical in excess of an applicable reporting threshold in a given year.¹⁰⁷

Form R information includes data on:

- The facility;
- The toxic chemical manufactured, processed, or used;
- Releases of the toxic chemical;
- Off-site transfers and on-site waste treatment, and;
- Source reduction and recycling activities.¹⁰⁸

EPCRA section 313 requires reporting of both intentional and accidental releases of toxic chemicals, including:

- Discharges to streams or water bodies;
- Fugitive or non-point air emissions;

¹⁰⁵ *Id.* Certain toxics that are known to bioaccumulate have lower thresholds.

¹⁰⁶ Standard Industrial Codes 20 through 39 cover the manufacturing industries, including chemical, petroleum, paper, and textile products. In 1997, the United States agreed to adopt the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) codes. Part 68 of the Code of Federal Regulations is being revised to reflect this change.

¹⁰⁷ 40 C.F.R. §372.22

¹⁰⁸ Paul E. Hagen, *Update on the Emergency Planning and Community Right-To-Know Act*, SB25 ALI-ABA 73 (October 24, 1996).

- Stack or point source emissions, and;
- Transfers of wastes to offsite locations.¹⁰⁹

2. *Implications for Federal Contractors*

Entities that contract with the federal government became especially concerned with the TRI and similar programs in 1995, when President Clinton signed Executive Order 12969.¹¹⁰ Declaring that the “efficiency of the Federal Government is served when it purchases high quality supplies and services that have been produced with a minimum impact on the public health and environment of communities surrounding government contractors,”¹¹¹ Executive Order 12969 sought to incorporate the reporting requirements of EPCRA section 313 into the federal procurement system. It did so by requiring executive agencies, in contract solicitations for acquisitions over \$100,000 (including options), include as an eligibility criterion a requirement that contractors comply with the TRI program.¹¹² The E.O. states that “each federal agency shall, to the maximum extent practicable, include in contract solicitations as an eligibility criterion for the award of competitive acquisition contracts expected to equal or exceed \$100,000...the requirement that such contractors must file (and continue to file for the life of the contract) a Toxic Chemical Release Form (“Form R”) as described [in EPCRA §313(a) & (g)] for each

¹⁰⁹ EPCRA §313

¹¹⁰ *Supra* note 34.

¹¹¹ *Id.*

¹¹² *Id.*

toxic chemical manufactured, processed, or otherwise used by the federal contractor at a facility described in [EPCRA §313].”¹¹³

The order goes on to say that if the Administrator of EPA determines that a federal contractor has not complied with section 3-301, the Administrator or her designee

¹¹³ *Id* at §3-301. Section §3-303 of the E.O. states that the agency shall find that a prospective contractor has satisfied these requirements if it certifies in a solicitation that it:

- Does not manufacture, process, or otherwise use any toxic chemicals listed under §313 of EPCRA;
- Does not have 10 or more full-time employees as specified in §313(b)(1)(A) of EPCRA;
- Does not meet the reporting thresholds established under §313(f) of EPCRA, or;
- Has complied fully with §4-404 of the Executive Order.

Section 404 of the order states that “each federal agency shall require each federal contractor designated in §3-302 to:

- a) Have included in its response to the contract solicitation a certification...that it will, (if awarded the contract) comply with the requirements of §3-301, and;
- b) File with the [EPA] Administrator and each appropriate state pursuant to §313(a) of EPCRA, the information required by §3-301, beginning on the next July 1 after the date on which the contract is awarded.

may recommend termination of the contract for the convenience of the government.¹¹⁴

The Administrator will transmit her recommendation to the head of the contracting agency who will “consider the recommendation and determine whether to terminate the contract.”¹¹⁵ The order allows the Administrator to investigate any subject federal contractor to determine the adequacy of compliance with the provisions of the order.¹¹⁶

In its implementation guidance on this E.O.,¹¹⁷ EPA explains that each federal agency is “required to include in competitive acquisition solicitations for the award of contracts expected to exceed \$100,000, the requirement that federal contractors ensure that covered facilities file a Form R for the life of the contract.”¹¹⁸

¹¹⁴ *Id.* at §4-406. Public or private hearings may be held to assist the Administrator in determining compliance, and each contracting agency must cooperate with the Administrator by providing information and assistance.

¹¹⁵ *Id.* at §4-406.

¹¹⁶ *Id.* at §4-406.

¹¹⁷ Guidance Implementing Executive Order 12969; Federal Acquisition; Community Right-To-Know; Toxic Chemical Release Reporting, 60 Fed. Reg. 50738 (Sep. 29, 1995).

¹¹⁸ *Id.* at 50738. The guidance clarifies that the E.O. affects Federal contractors and prospective Federal contractors, including certain subcontractors. It also confirms that the E.O. is “not intended to expand the types of facilities currently providing information for the TRI.” Also significant is EPA’s interpretation, consistent with §3-305 of the order, that the order only applies to competitive solicitations. Citing the Federal Acquisition Streamlining Act of 1994 (FASA)¹¹⁸, EPA expressed its belief that only competitive acquisition solicitations that are expected to result in a contract exceeding \$100,000, including options, should include the certifications required by the E.O.

EPA also found the E.O. applicable to commercial items, but did not develop specific implementation provisions, apparently feeling they were not necessary because the Federal Acquisition Streamlining Act already contained a provision reminding contractors that they were obligated to comply with other laws.

The Civilian Agency Acquisition Council and the Defense Acquisition Council complied with E.O. 12969 by amending FAR Parts 23 and 52 by final rule on August 8, 1996.¹¹⁹ Part 23.905 explains the policy behind the new FAR provisions, stating: “(a) it is the policy of the Government to purchase supplies and services that have been produced with a minimum adverse impact on community health and the environment,” and “(b) Federal agencies, to the greatest extent practicable, shall contract with companies that report in a public manner on toxic chemicals released into the environment.”¹²⁰ FAR Part 23.906(c) mandates that awards shall not be made to offerors who do not certify compliance with EPCRA (or exemption from EPCRA requirements) as required by the E.O.¹²¹

Although President Clinton revoked Executive Order 12969 On April 26, 2000,¹²² the procurement requirements established by the E.O. remain in effect as FAR provisions. The original order was supplanted by Executive Order 13148, “Greening the

EPA concluded its implementation guidance by reminding readers that “nothing in E.O. 12969 or this guidance replaces or obviates the obligation of a facility owner or operator to comply with the reporting and recordkeeping requirements of [EPCRA and Pollution Prevention Act of 1990]. Although [the order] establishes a \$100,000 applicability threshold, it is important for the regulated community to recognize that no such threshold exists with respect to the reporting or recordkeeping requirements of EPCRA §313...”

¹¹⁹ Final Rule, 61 Fed. Reg. 41473. (Amending 48 CFR Parts 23 and 52).

¹²⁰ FAR Part 23.905(a) & (b).

¹²¹ FAR Part 23.906(c).

¹²² E.O. 13148 “Greening the Government Through Leadership in Environmental Management,” at §901 (65 Fed. Reg. 24595 (April 26, 2000)).

Government Through Leadership in Environmental Management”¹²³ which is much broader than the original and covers a variety of environmental management issues. It charges heads of Federal agencies with making environmental management considerations a “fundamental and integral component of Federal Government policies, operations, planning and management.”¹²⁴ This expansion of E.O. 12969 continues to recognize the key role government contractors occupy in this area and the critical information in their possession regarding chemical processes and potential hazards.

C. The Clean Air Act’s Risk Management Program

The TRI Program paved the way for similar approaches in other environmental statutes. Perhaps the most controversial today is the Risk Management Program¹²⁵ found in section 112(r)¹²⁶ of the 1990 amendments to the Clean Air Act.¹²⁷ While the legislative history of the 1990 amendments is extensive,¹²⁸ little can be found regarding section 112(r). Its inclusion in the legislation apparently generated little or no controversy at the time and seems to have been largely overlooked amidst the battles over

¹²³ *Id.*

¹²⁴ *Id.* at §101.

¹²⁵ Hereinafter “RMP”

¹²⁶ 42 U.S.C. §7412(r)

¹²⁷ 42 U.S.C. §§7401-7671q (2000).

¹²⁸ See generally, Arnold W. Reitze, *The Legislative History of U.S. Air Pollution Control*, 36 Hous. L. Rev. 679 (1999).

visibility, mobile source emissions, and acid rain.¹²⁹ The RMP gained greater visibility throughout the 1990s, however, as EPA proposed and promulgated implementing regulations.¹³⁰ Industry, lawmakers, law enforcement organizations, emergency response personnel, and the press all began expressing concerns as the true nature and magnitude of the RMP began to become clear. The rising threat of domestic terrorist attacks during the 1990s also caused concern and led to legislative and regulatory reform, as the following subsections will illustrate.

1. CAA Section 112(r) Basics

Section 112(r) has three major elements.¹³¹ It imposes upon owners and operators of stationary sources producing, processing, handling, or storing certain listed hazardous substances (or any other extremely hazardous substance) a general duty to:

- identify hazards which may result from releases of listed chemicals;
- design and maintain a safe facility taking such steps as are necessary to prevent releases; and
- minimize the consequences of accidental releases which do occur.¹³²

¹²⁹ *Id.*

¹³⁰ List of Regulated Substances and Thresholds for Accidental Release Prevention; Requirements for Petitions Under Section 112(r) of the Clean Air Act as Amended, 59 Fed. Reg. 4478 (January 31, 1994); Requirements: Risk Management Programs for Chemical Accident Release Prevention, Under Clean Air Act Section 112(r)(7), 58 Fed. Reg. 54190 (proposed October 20, 1993); Accidental Release Prevention Requirements; Interpretations, 62 Fed. Reg. 45,134, 45,134 (Aug. 25, 1997).

¹³¹ CAA§112(r)(1).

¹³² *Id.*

The section 112(r) program applies to stationary sources.¹³³ The definition of “stationary source” is very broad, encompassing “any buildings, structures, equipment, installations or substance emitting stationary activities (i) which belong to the same industrial group, (ii) which are located on one or more contiguous properties, (iii) which are under the control of the same person (or persons under common control), (iv) from which an accidental release may occur.”¹³⁴ The program covers accidental releases of a “regulated substance” or other extremely hazardous substance¹³⁵ into the ambient air from a stationary source.¹³⁶ Congress specified a list of sixteen chemicals in the statute and charged the EPA with creating an initial list of 100 substances.¹³⁷ The list is to be comprised of substances which, in the case of accidental release are “known to cause death, injury, or serious adverse effects to human health or the environment.”¹³⁸ A “threshold quantity” of each substance must be established by EPA at the time of listing.¹³⁹ In determining threshold quantities, EPA must take into account the “toxicity, reactivity, volatility, dispersibility, combustibility, or flammability of the substance and the amount of the substance which, as a result of an accidental release, is known to cause

¹³³ CAA §112(r)(1).

¹³⁴ CAA §112(r)(2)(C).

¹³⁵ The term “other extremely hazardous substance” is not defined in the statute.

¹³⁶ *Id.* §112(r)(2)(A).

¹³⁷ *Id.* §112(r)(3).

¹³⁸ *Id.*

¹³⁹ *Id.* §112(r)(5).

or may reasonably be anticipated to cause death, injury or serious adverse effects to human health for which the substance was listed.”¹⁴⁰ EPA issued its final rule listing regulated substances and setting their threshold levels on January 31, 1994.¹⁴¹ The regulations cover seventy-seven toxic substances, sixty-three flammable substances, and the explosive substances listed by the Department of Transportation.¹⁴² The list has been amended several times, changing the concentration of hydrochloric acid,¹⁴³ delisting Division 1.1 explosives,¹⁴⁴ and clarifying the method for calculating the quantity of a listed solution.¹⁴⁵ In 1999, most of the propane industry was exempted from section 112(r) requirements by the Chemical Safety Information, Site Security, and Fuels Regulatory Relief Act (CSISFFRA).¹⁴⁶ The CSISFFRA had several provisions pertinent to this article and will be further discussed in a later section.

¹⁴⁰ *Id.*

¹⁴¹ List of Regulated Substances and Thresholds for Accidental Release Prevention, Requirements for Petitions Under Section 112 (r) of the CAA as Amended, 59 Fed. Reg. 4478, 4493 (Jan. 31, 1994). (Codified at 40 C.F.R. pts. 9, 68).

¹⁴² *Id.* at 4478.

¹⁴³ List of Regulated Substances and Thresholds for Accidental Release Prevention, 62 Fed. Reg. 45,130, 45,132 (Aug. 25, 1997).

¹⁴⁴ List of Regulated Substances and Thresholds for Accidental Release Prevention: Amendments, 63 Fed. Reg. 640, 644 (Jan. 6, 1998).

¹⁴⁵ Accidental Release Prevention Requirements; Interpretations, 62 Fed. Reg. 45,134, 45,134 (Aug. 25, 1997). This interpretation also clarified that certain reports required under §112(r) did not need to be reported under §8(e) of the Toxic Substances Control Act.

¹⁴⁶ Pub. L. 106-40 (Aug. 5, 1999).

After the final rule was promulgated, it was expected that nearly 70,000 chemical-handling facilities would be required to develop risk management plans under section 112(r).¹⁴⁷ Critical to determining applicability of the RMP to a given facility is the threshold amount of a listed substance used or stored at a stationary source. If the total quantity of a listed substance contained in a process at a facility exceeds the threshold amount listed in 40 C.F.R. §68.130, the facility is subject to the accidental release program requirements of section 112(r).¹⁴⁸ Many potentially covered facilities changed processes, materials, or storage protocols to avoid being subject to the rule¹⁴⁹ and therefore the final number of facilities subject to the rule turned out to be closer to 15000, far less than the original estimate.¹⁵⁰ EPA estimated that CSISSFRRRA alone exempted approximately 2000 facilities that store or handle flammable fuels.¹⁵¹ A variety of industries are affected by section 112(r), including chemical manufacturers, wastewater treatment plants, public drinking water treatment facilities, chemical wholesalers and a

¹⁴⁷ *Nearly 70,000 Facilities Must Develop Air Act Risk Management Plans by 1999*, Daily Env't Rep. (BNA), May 30, 1996, at AA-1.

¹⁴⁸ 40 C.F.R. §68.115.

¹⁴⁹ As hoped, safety was arguably enhanced by process and material changes at facilities, but critics noted that reduction in on-site storage of chemicals simply moves safety and security problems from facilities to the nation's road and rail system. This appears to be an unintended consequence of the program. *See e.g., Facilities Change Operations to Avoid RMP Requirements, EPA Official Says*, 23 Chem. Reg. Rep. 1292 (BNA), November 12, 1999.

¹⁵⁰ Judith Jacobs, *Fewer Plants Filing RMPs With Agency Than Expected Under Clean Air Mandate*, 30 Env't. Rep. Curr. Dev. 784 (BNA), August 20, 1999.

¹⁵¹ *Changes to Flammable Fuel Provisions of CAA Safety Rules Signed By Browner* 24 Chem. Reg. Rep. 519 (BNA), March 13, 2000.

myriad of others.¹⁵² Covered facilities must develop and implement a risk management program.¹⁵³ The program must include “a hazard assessment, a management program, a prevention program, and an emergency response program. The risk management program must be described in a risk management plan (RMP) that must be registered with the EPA, submitted to state and local authority, and *made available to the public.*”¹⁵⁴

2. CAA Section 112(r) Program Levels and Their Requirements

Covered facilities under section 112(r) are divided into three program levels, based on the amount of risk they present.¹⁵⁵

Program Level 1 processes are those that present the least risk to the public. They are facilities that:

¹⁵² In addition to processes listed in the body of this article, EPA lists the following examples of specific operations which may be regulated under the RMP rule: manufacturers of inorganic/organic/agricultural chemicals, industrial gases, plastics, resins, metals, equipment, petroleum refineries and gas processing plants, food businesses with large ammonia refrigeration systems, pulp and paper mills, larger industrial facilities that store propane for use as fuel, agricultural retailers who sell ammonia fertilizer, refrigerated warehouses, warehouses that handle chemicals, chemical distributors, electric companies, and large U.S. military and Department of Energy installations. CHEMICAL EMERGENCY PREPAREDNESS AND PREVENTION OFFICE, U.S. ENVIRONMENTAL PROTECTION AGENCY, *RMPS ARE ON THE WAY: HOW LEPCs AND OTHER LOCAL AGENCIES CAN INCLUDE INFORMATION FROM RISK MANAGEMENT PLANS IN THEIR ONGOING WORK* (1999) (EPA 550-B99-003).

¹⁵³ Accidental Release Prevention Requirements: Risk Management Programs Under CAA Section 112(r)(7), 61 Fed. Reg. 31,667 (June 20, 1996) (Codified at 40 C.F.R. Part 68. [hereinafter RMP Rule].

¹⁵⁴ *Id.* at 31669 (emphasis added).

¹⁵⁵ *Id.*

(i) have had no accidental releases resulting in offsite impacts within five years of RMP submittal;

(ii) have no public receptors in worst case scenario zone; and,

(iii) have coordinated emergency response procedures with local emergency organizations.¹⁵⁶

Program Level 2 processes are those that are not eligible for Program 1 or subject to Program 3.¹⁵⁷

Program Level 3 processes are those not eligible for Program 1 that are subject to the OSHA process safety management standard or in ten specified North American Industry Classification System (NAICS) categories.¹⁵⁸

Facility RMP requirements vary depending on the program levels applicable to the facility's covered processes. Those subject to Program Level 1 must develop and submit a hazard assessment with a worst-case offsite consequence analysis and five year accident history, a prevention program that certifies that no additional prevention steps are necessary, and coordinate with local responders.¹⁵⁹ Program Levels 2 and 3 are much more complex. RMPs must include information required for Program 1 plus an

¹⁵⁶ *Id.* at 31,670.

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* The ten specified categories are NAICS codes 32211 (pulp mills), 32411 (petroleum refineries), 32511 (petrochemical manufacturers), 325181 (alkalies and chlorine), 325188 (industrial inorganic chemicals), 325192 (cyclic crudes), 325199(industrial organic chemicals), 325211 (plastics and resins), 325311 (nitrogenous fertilizers), and 32532 (agricultural chemicals).

¹⁵⁹ *Id.*

alternative release analysis, a document management system, a much more involved prevention program,¹⁶⁰ and development of a plan and program for emergency response.¹⁶¹

3. *Offsite Consequence Analysis*

One common element of all three programs is the requirement that owners and operators of covered facilities analyze the offsite consequences of a release through the development and submission of “worst case scenarios” (and, in the case of Program levels 2 and 3, “alternative release scenarios”).¹⁶² A worst case scenario is defined as

The release of the largest quantity of a regulated substance from a vessel or process line failure, including administrative controls and passive mitigation that limit the total quantity involved or the release rate. For most gasses, the worst-case release scenario assumes that the quantity is released in 10 minutes. For liquids, the scenario assumes an instantaneous spill; the release rate to the air is the volatilization rate from a pool 1 cm deep unless passive mitigation systems contain the substance in a smaller area. For flammables, the worst case assumes an instantaneous release and a vapor cloud explosion.¹⁶³

An alternative release scenario is one that is “more likely to occur” and “more realistic” than the worst case scenario.¹⁶⁴ EPA wanted sources to have the flexibility to select non-

¹⁶⁰ For Program Level 2, the prevention program includes requirements regarding process safety information, hazard review, operating procedures, training, maintenance, incident investigation, and compliance audits. Level 3 adds management of change, pre-startup review, contractor, employee participation, and hot work permit requirements.

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ *Id.*

worst-case scenarios that were “the most useful for communication with the public and first responders and for emergency response preparedness and planning.”¹⁶⁵ Critical to the calculation of offsite consequence analysis is the concept of “endpoint.” For toxics, this is the concentration of the substance in the air below which it is believed that most people could be exposed for up to one hour without serious health effects.¹⁶⁶ For flammables, endpoint depends on the type of release considered. Endpoints for covered substances are also listed in the RMP Final Rule.¹⁶⁷ Calculation of a release’s endpoint is important because a “worst case circle” can then be drawn, indicating potentially affected public receptors.¹⁶⁸ Combined with required modeling parameters for wind speed, ambient temperature, humidity, height of release, surface roughness, density of gases, and temperature of released substances,¹⁶⁹ an estimate of numbers of people potentially at risk in any given scenario can be determined. This is a valuable figure in planning for accident prevention and emergency response.¹⁷⁰ EPA has published a guidance document for offsite consequence analysis that includes detailed instructions on

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ 40 C.F.R. 68.22(a-e).

¹⁷⁰ Or, as some would argue, a valuable figure for terrorists planning an attack. *See generally, supra* note 5.

calculating worst case and alternative release scenarios.¹⁷¹ EPA has also developed, in cooperation with the National Oceanic and Atmospheric Administration, a software program, RMP*Comp™ that performs calculations described in the guidance document.¹⁷² This software is publicly available. Other public and proprietary models are also available.¹⁷³

Owners and operators were required to submit their first RMP by June 21, 1999¹⁷⁴. Updates are required every five years if not required sooner due to process changes or acquisition of new chemicals above the threshold quantity.¹⁷⁵

While the requirement for development of worst case and alternative scenarios has not been widely criticized, the requirement that such offsite consequence analysis (OCA) be released to the public has been a matter of great concern¹⁷⁶. CAA section 112(r) mandates that risk management plans be made available to the public¹⁷⁷. EPA originally interpreted this to mean that all sections of every RMP were to be made

¹⁷¹ U.S. EPA, RISK MANAGEMENT PROGRAM GUIDANCE FOR OFFSITE CONSEQUENCE ANALYSIS (1999) (EPA-550-B-99-009).

¹⁷² RMP*Comp™ can be downloaded at <http://www.epa.gov/ceppo/ds-epds.htm#comp>.

¹⁷³ EPA lists several models in its Guidance Document *supra* note 153.

¹⁷⁴ 40 C.F.R. §68.10.

¹⁷⁵ See RMP rule, *supra* note 153.

¹⁷⁶ See generally, *supra* notes 5, 6, and 7.

¹⁷⁷ CAA§112(r)(7)(B)(iii).

available electronically, and began making plans to make them available for downloading on its website.¹⁷⁸

C. The Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (CSISSFERRA)

1. The Statute

EPA's announcement that it would make RMPs available for downloading on its public website generated a great deal of discussion between industry, right-to-know proponents, law enforcement organizations, intelligence agencies, and the emergency response community. In particular, EPA later cited concerns by the "FBI and other representatives of the law enforcement and intelligence communities" in deciding to post RMPs on the internet without OCA results.¹⁷⁹ Executive Summaries of RMPs were posted, however, and the OCA sections (and any EPA electronic database created from those sections) were still subject to release in electronic format under the Freedom of Information Act.¹⁸⁰ Congress became aware of this apparently unexpected development and, in 1999 passed the CSISSFERRA¹⁸¹ to deal with the public disclosure problem. This legislation added subsection 112(r)(7)(H) to the Clean Air Act in an attempt to control

¹⁷⁸ See Merideth Preston, *Two Systems Under Development at EPA to Allow Access to Chemical Accident Data*, 25 Chem. Reg. Rep. (BNA) 226 (2001).

¹⁷⁹ Accidental Release Prevention Requirements; Risk Management Programs Under the Clean Air Act Section 112(r)(7); Distribution of Off-Site Consequence Analysis Information, 65 Fed. Reg. 48108 (August 4, 2000). [Hereinafter CSISSFERRA Final Rule].

¹⁸⁰ 5 U.S.C. §552.

¹⁸¹ Pub. L. 106-40 (Aug. 5, 1999).

public access to off-site consequence information.¹⁸² Section H, entitled “Public Access to Off-site Consequence Analysis Information,” required the President to assess within one year of promulgation:

- 1) the increased risk of terrorist and other criminal activity associated with the posting of off-site consequence analysis information on the internet;¹⁸³ and,
- 2) the incentives created by public disclosure of off-site consequence analysis for reduction in the risk of accidental releases.¹⁸⁴

Based on these assessments, the President was to promulgate regulations:

governing the distribution of off-site consequence analysis information in a manner that, in the opinion of the President, minimizes the likelihood of accidental releases and the risk described in subclause (I)(aa)¹⁸⁵ and the likelihood of harm to public health and welfare, and;

¹⁸² As previously discussed, CSISSFRRRA also exempted from the provisions of §112(r) flammable substances:

[w]hen used as a fuel or held for sale as a fuel at a retail facility under this subsection solely because of the explosive or flammable properties of the substance, unless a fire or explosion caused by the substance will result in acute adverse health effects from human exposure to the substance, including the unburned fuel or its combustion byproducts, other than those caused by the heat of the fire or impact of the explosion.” CSISSFRRRA §2(4)(B). [Codified at 42 U.S.C. 7412(r)(4)(B)].

This effectively exempted much of the propane industry from the RMP. *See, Changes to Flammable Fuel Provisions of CAA Safety Rules Signed by Browner*, Daily Env’t Rep. (BNA), Mar 9, 2000.

¹⁸³ CSISSFRRRA §3(a) [codified at 42 U.S.C. 7412(r)(7)(H)(ii)(I)(aa)].

¹⁸⁴ CSISSFRRRA §3(a) [codified at 42 U.S.C. 7412(r)(7)(H)(ii)(I)(bb)].

¹⁸⁵ *Supra*, note 183.

(aa) allows access by any member of the public to paper copies of off-site consequence analysis information for a limited number of stationary sources located anywhere in the United States, without any geographical restriction;

(bb) allows other public access to off-site consequence analysis as appropriate;

(cc) allows access for official use by a covered person ... to offsite consequence analysis information relating to stationary sources located in the person's State;

(dd) allows a State or local covered person to provide, for official use, off-site consequence analysis information relating to stationary sources located in the person's State to a State or local covered person in a contiguous state; and

(ee) allows a State or local covered person to obtain for official use, by request to the Administrator, off-site consequence analysis information that is not available to the person under item (cc).¹⁸⁶

The statute went on to exempt off-site consequence information and any ranking of stationary sources derived from the information from release under the FOIA¹⁸⁷ for one year. OCA information was to be made available only to covered persons for official use and to the public "in a form that does not make available any information concerning

¹⁸⁶ CSISSFRRA §3(a) [codified at 42 U.S.C. 7412(r)(7)(H)(ii)(II)]. The definition of "covered person" was added at 42 U.S.C 7412(r)(7)(H)(i)(I)(aa-gg) and includes officers and employees of the U.S., State, and local governments, officers or employees of agents or contractors of Federal, State, or local government, individuals given prevention, planning, or response responsibilities for accidental releases, and certain qualified researchers.

¹⁸⁷ *Supra*, note 180.

the identity or location of stationary sources”¹⁸⁸ until the promulgation of regulations or one year, whichever was earlier. Covered persons were prohibited from making unauthorized disclosures of OCA information in any form.¹⁸⁹ Criminal penalties were authorized for willful disclosure of unauthorized information.¹⁹⁰ Finally, the statute required owners and operators of stationary sources subject to section 112(r) to convene, within 180 days of enactment, a public meeting “in order to describe and discuss the local implications of the risk management plan submitted by the stationary source pursuant to section 112(r)(7)(B)(iii) of the Clean Air Act, including a summary of the off-site consequence analysis portion of the plan.”¹⁹¹

2. The Benefit Analysis and Risk Assessment

President Clinton delegated authority for the assessments required under CSISSFRRRA to the Attorney General and the Administrator of EPA.¹⁹² The assessments were then used as the basis for the proposed rule.¹⁹³ EPA and DOJ did not allow the assessments themselves to be subject to public evaluation during the notice and comment

¹⁸⁸ CSISSFRRRA §3 [codified at 42 U.S.C. 7412(r)(7)(H)(iv)].

¹⁸⁹ CSISSFRRRA §3[Codified at 42 U.S.C. 7412(r)(7)(H)(v)(I)].

¹⁹⁰ CSISSFRRRA §3[Codified at 42 U.S.C. 7412(r)(7)(H)(v)(II)].

¹⁹¹ CSISSFRRRA §4(a).

¹⁹² Delegation Memorandum, 65 Fed. Reg. 8631 (Feb. 22, 2000).

¹⁹³ The assessments were originally available on the DOJ and EPA websites (www.usdoj.gov and www.epa.gov/ceppo/). They have since been pulled. Assessment summary for this article is taken from the Final Rule, *supra* note 182.

period of the proposed rule, but did respond to several critiques while discussing comments on the rule.¹⁹⁴

The risk assessment found that an increased risk of terrorist or other criminal activity would accompany the release of certain items of OCA information via the Internet.¹⁹⁵ The study concluded that posting OCA information would “provide someone seeking to target or maximize an industrial chemical release with helpful information that is not currently available, and therefore, that posting OCA information on the Internet would increase the risk of a terrorist using the information for that purpose.”¹⁹⁶ Critics contested that conclusion, arguing that information identical or similar to OCA information was already publicly available, and therefore the risk assessment overstated the dangers of posting the information on the Internet.¹⁹⁷ While agreeing that some information was already available, the risk assessment, and EPA in its discussion of the final rule, argued that information most likely sought by terrorist groups, (e.g. distance to endpoints, affected populations, etc.) had “not been assembled into a publicly available resource that would be as comprehensive and accessible as OCA information would be if posted on the Internet, particularly in its database form.”¹⁹⁸ Along the same lines, other commentators questioned the risk posed by OCA information given that data similar to

¹⁹⁴ *Supra*, note 182, at 48110.

¹⁹⁵ *Id.* at 48112.

¹⁹⁶ *Id.* at 48112 (Quoting DOJ/EPA Risk Assessment).

¹⁹⁷ *Id.* at 48112.

¹⁹⁸ *Id.* at 48112.

OCA could be calculated using publicly available sources of information. EPA discounted this possibility by agreeing with the risk assessment's conclusion that "calculating information like OCA information using available resources of data would be possible but would require significant effort and know-how."¹⁹⁹ Others pointed out that public release of OCA data would likely result in a significant reduction in chemical risk by allowing communities to prevent, plan for, and respond to chemical accidents. EPA agreed with this comment (the benefits analysis, discussed *infra*, reached the same conclusion), but pointed out that this risk reduction would not offset the risk of disseminating the information over the Internet. Further, EPA argued that any such benefits would be realized over time, while the risk of disclosure would be immediate.²⁰⁰

The benefits assessment attempted to draw an analogy between EPA's experience with the TRI program²⁰¹ and what might be expected for OCA information. While some commentators questioned the appropriateness of such a comparison, given that TRI data records are based on actual releases and OCA information is based on hypothetical, unanticipated releases,²⁰² EPA defended the analogy. It relied on the similarity of the two types of data, pointing out that TRI data are "made publicly available in an easily used and understood format."²⁰³ EPA also noted the assessment's correlation between "the

¹⁹⁹ *Id.* at 48112. In this post-9/11 environment, one might ask if this "significant effort and know-how" is greater or less than that required to learn to pilot a Boeing 757.

²⁰⁰ *Supra*, note 182 at 48113.

²⁰¹ EPCRA §313, discussed *supra*.

²⁰² *Supra*, note 182 at 48110.

²⁰³ *Id.*

ready accessibility of TRI data and the extensive use made of it by community and environmental groups, the news media, state and local governments, and industry,”²⁰⁴ and its conclusion that “a similar correlation might reasonably be expected from the dissemination of OCA information.”²⁰⁵ EPA noted, for example, that the media had relied on total emissions data to label certain facilities “worst polluters” and found that, according to TRI data, the “worst polluters” facilities featured in news stories reduced their emissions significantly more than non-featured facilities.²⁰⁶ Based on this and similar evidence, EPA stated that it continues to believe that “if OCA information, like TRI data, were made publicly available in an easily understood format, there would be increased public understanding and dialogue about accidental release risk and risk reduction.”²⁰⁷ EPA went on to express its further belief that “the resulting public pressure [from the increased understanding] could lead to the adoption of additional risk reduction measures.”²⁰⁸ The agency concluded this area of comment with the following statement: “[W]e remain convinced that the assessment correctly concluded that readily available, easily accessible, and interpreted OCA information, in combination with RMP information, would stimulate public dialogue about chemical risks, and would result in at

²⁰⁴ *Id.*

²⁰⁵ *Id.*

²⁰⁶ *Id.* at 48110.

²⁰⁷ *Id.* at 48111.

²⁰⁸ *Id.*

least some of the 15,000 covered facilities implementing additional risk reduction measures.”²⁰⁹

3. *The Final Rule*

After weighing the risk assessment against the benefit analysis, EPA and DOJ came to the conclusion that “unfettered release of OCA information [would not] achieve the statutory objective of minimizing the risk of chemical release, however caused.”²¹⁰ Based on this conclusion, the final CSISSFRRA rule was issued on August 4, 2000.²¹¹ During the comment period preceding issuance of the final rule,²¹² sixty-eight comments were submitted.²¹³ Commentors represented industry, trade associations, public interest groups, journalists, environmental groups, law enforcement, emergency response groups, state and local entities, and the general public.²¹⁴ Many commentors questioned the legitimacy of the benefits assessment and risk analysis, as discussed previously, but others responded to the proposed CSISSFRRA implementation scheme itself.²¹⁵ Several

²⁰⁹ *Id.*

²¹⁰ *Supra*, note 182 at 48113.

²¹¹ *Supra*, note 182.

²¹² The proposed rule was published on April 27, 2000. *See* EPA/Justice Department Proposal on Management of Off-Site Consequence Analysis Information, 65 Fed. Reg. 24,834 (April 27, 2000).

²¹³ *Supra*, note 85 at 48109.

²¹⁴ *Id.* at 48110.

²¹⁵ *See*, James Kennedy, *Worst-Case Scenario Rule Will Limit Access to Sensitive Data on Chemicals*, Env’t Rep. Curr. Dev. (BNA) August 4, 2000.

groups felt the proposed rule still allowed too much information to be publicly disseminated.²¹⁶ For example, comments filed on behalf of the Regulatory Studies Program at George Mason University claimed that “nothing in the rule would prevent...organizations or individuals from gathering information in the reading rooms, and posting them on their own Internet site.”²¹⁷ This group also contended that the proposed rule would offer little public benefit, stating “there is little or no evidence that public disclosure of information prompts facilities to minimize the threat of accidental chemical releases”²¹⁸ In contrast to these arguments, two Democrats, Senators Max Baucus of Montana and Frank Lautenberg of New Jersey were quite vocal in their opposition to the rule for the opposite reason. In a letter to EPA Administrator Browner and Attorney General Reno, the senators complained that the proposed rule would “have serious health and safety implications.”²¹⁹ The senators believed that under the proposed rule the public “would have very limited access to important information on the hazards chemical plants present neighborhoods, schools, and workplaces,”²²⁰ and “ignores provisions we specifically wrote into the 1999 law to balance the risk reduction benefits of public disclosure against the incremental risk of terrorism due to Internet access to this

²¹⁶ *Id.*

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ Quoted in *EPA, DOJ Propose Public Reading Rooms For Hypothetical Chemical Accident Data*, Env't Rep. Curr. Dev. (BNA) April 28, 2000.

²²⁰ *Id.*

information.”²²¹ Senators Baucus and Lautenberg viewed the proposed rule as a “virtual information blackout” that was contrary to EPA’s “own assessment that public disclosure of the information would likely lead to significant reduction in the number and severity of chemical accidents.”²²² The Earthjustice Legal Defense Fund’s comments supported this position, arguing that there is extensive evidence showing how meaningful public access to information can reduce risks.²²³ Nonetheless, EPA and DOJ proposed to limit information “in a draconian fashion.”²²⁴

Despite heated arguments on both sides, the final rule survived relatively unchanged. In the discussion of the final rule, EPA and DOJ expressed their belief that they were balancing the concerns of both sides by making as much OCA information as appropriate available online, but not posting information the risk assessment had indicated would pose a significant risk for terrorism or criminal purposes.”²²⁵ In contrast to the complaints of the Democratic senators, EPA/DOJ felt that the final rule would “provide several means for individuals to obtain OCA information not only for facilities within their community but also for a sufficient number of facilities located elsewhere,

²²¹ *Id.*

²²² *Id.*

²²³ Kennedy, *supra* note 218.

²²⁴ *Id.*

²²⁵ *Supra*, note 182 at 48127.

thereby enabling individuals to compare facilities' safety and prevention measures and records."²²⁶

CSISSFRRA requires the government to provide individuals with paper copies of OCA information. To accomplish this, the final rule created "federal reading rooms."²²⁷ EPA and DOJ set up more than fifty public reading rooms across the United States in which members of the public can gain access to OCA information. Any individual can sign into a reading room and will be provided access to a paper copy of OCA information for up to ten stationary sources per calendar month located anywhere in the country, without geographical restriction.²²⁸ Additionally, an individual will be given access to OCA information for any facility within the Local Emergency Planning Committee (LEPC)²²⁹ jurisdiction where the individual lives or works, and for any facilities having vulnerable zones extending into those LEPC jurisdictions.²³⁰ Persons visiting federal reading rooms are allowed to take handwritten notes regarding the information they view, but are not allowed to remove or mechanically reproduce information.²³¹ The rule requires reading room personnel to view photographic identification of any person

²²⁶ *Id.*

²²⁷ *Id.*

²²⁸ *Id.* at 48127.

²²⁹ EPCRA §313, discussed *supra*, requires the Governor of each state to appoint a State Emergency Response Commission (SERC). The SERC, in turn, establishes emergency planning districts within the state, each of which has a Local Emergency Planning Committee.

²³⁰ *Supra*, note 182 at 48127.

²³¹ *Id.*

wishing to view OCA information and have them sign in. Except for prohibiting individuals from viewing more than the above-stated monthly or geographically limited information, the rule does not authorize government personnel to exclude anyone from viewing OCA information.

A lesser known provision of the final rule established the “Vulnerable Zone Indicator System” (VZIS).²³² This system provides persons with the means of obtaining, either through electronic mail, U.S. mail, or telephonically, “information regarding the risk expressed by OCA information without providing Internet access to the OCA information itself.”²³³ Basically, the system allows individuals to contact EPA and ask whether a specific address falls within any facility’s reported worst-case or alternative release scenario’s distance to endpoint.²³⁴ VZIS also provided information to individuals on how to identify which facility was theoretically putting the requested address at risk.²³⁵

The final rule also determined what portions of OCA information would be made available to the public through posting on the EPA website, and what portions would be withheld. The following items of OCA information were seen as posing the least risk and would be posted:

- The concentration of the chemical;

²³² *Id.*

²³³ *Id.*

²³⁴ *Id.* The final rule defined this area as a facility’s “vulnerable zone.”

²³⁵ *Id.*

- The physical state of the chemical;
- The duration of the chemical release for the worst-case scenario;
- The statistical model used;
- The endpoint used for flammables for the worst-case scenario;
- The wind speed during the chemical release;
- The atmospheric stability;
- The topography of the surrounding area;
- The passive mitigation systems considered, and;
- The active mitigation systems considered;²³⁶

The final rule precluded the following items from being posted on the EPA website, finding that their release on the internet would pose “significant security concerns.”²³⁷

- The name of the chemical involved;
- The scenario involved;
- The quantity of chemical released;
- The release rate of the chemical involved for the worst-case scenario;
- The release rate of the chemical involved for the alternative release scenario;
- The distance to endpoint;
- The endpoint used for flammables for the alternative release scenario;
- The residential population within the distance to endpoint;
- The public receptors within the distance to endpoint;

²³⁶ *Id.* at 48128.

²³⁷ *Id.*

- The environmental receptors within the distance to endpoint, and;
- Any map or other graphic used to illustrate a scenario.²³⁸

Finally, the rule stated EPA's decision to provide the public with additional information regarding chemical accident risk through a website of its own and through providing links to other websites dealing with the subject. Along with government sites, EPA pledged to link with sites from industry trade groups, environmental organizations, and academic institutions in order to provide the public with a "comprehensive means of finding chemical risk and safety organization."²³⁹

4. Developments After Issuance of the Final Rule

Immediately following issuance of the final rule, EPA and DOJ began creating federal reading rooms. These rooms opened to the public in early 2001.²⁴⁰ EPA originally planned to open approximately twenty rooms, while DOJ planned to open about fifty.²⁴¹ Currently, reading rooms exist in every state and several territories, according to information posted on the EPA website.²⁴² EPA also followed through with the somewhat less controversial Vulnerable Zone Indicator System. The VZIS web page allows individuals to enter a street address or latitude/longitude and receive an e-mail

²³⁸ *Id.*

²³⁹ *Id.*

²⁴⁰ Merideth Preston, *Worst Case Scenario Data Now Available at EPA Reading Rooms*, 25 Chem. Reg. Rep. 407 (BNA) February 19, 2001.

²⁴¹ *Id.*

²⁴² [Http://www.epa.gov/ceppo/readingroom.htm](http://www.epa.gov/ceppo/readingroom.htm). (Last visited May 28, 2002).

response regarding whether the address is in the vulnerable zone of a facility that submitted an RMP.²⁴³

The agency continued to post some RMP data on its website, as authorized in the final rule. This practice continued to generate controversy, especially in February, 2000, when a General Accounting Office (GAO) audit sharply criticized EPA's computer security system. After successfully penetrating EPA's operating systems and taking control of the network, GAO declared the agency's security program "the worst" of any it had audited.²⁴⁴ GAO went on to say that their review found "serious and pervasive problems that essentially render EPA's agency-wide information security program ineffective," and criticized the agency's security program planning and management as largely a "paper exercise that has done little to substantively identify, evaluate and mitigate risks to the agency's data and systems."²⁴⁵ Industry groups, especially the Chemical Manufacturers Association, whose members submit confidential business information and other sensitive data to EPA immediately expressed concerns, especially when it came to light that the agency had been aware of security problems for seven years.²⁴⁶ A spokesman for the National Safety Council publicly postulated that, based on information revealed in the GAO report, it appeared that hackers would be able to access

²⁴³ <http://www.epa.gov/ceppo/vzis.htm>. (Last visited May 28, 2002).

²⁴⁴ Pat Phibbs and Judith Jacobs, *Basic EPA Internet Access Reinstated, Right-To-Know Data Still Inaccessible*, 24 Chem. Reg. Rep. 365 (BNA) February 28, 2000.

²⁴⁵ *Id.*

²⁴⁶ *Id.*

the EPA website and corrupt or alter data in the TRI and RMPInfo databases.²⁴⁷ At the urging of two Republican congressmen, EPA temporarily closed its website and revamped its system.²⁴⁸

5. Post September 11 Developments

The September 11, 2001 terrorist attacks resulted in renewed debate between community right-to-know advocates and those who believe too much disclosure benefits terrorists or other criminals. In the wake of the terrorist attacks, many government departments and agencies quickly pulled potentially sensitive information from their websites. For example, the Department of Transportation's Office of Pipeline Safety removed access to the national pipeline mapping system²⁴⁹ and the Federal Aviation Administration removed its online link to airport enforcement data.²⁵⁰ The U.S. Nuclear Regulatory Commission shut down its entire website.²⁵¹ The U.S. Geological Survey, which had produced and distributed a CD-ROM containing information on bodies of

²⁴⁷ *Id.*

²⁴⁸ *Id.*

²⁴⁹ Shaun Schafer, *Federal Agencies Curb Access to Sensitive Public Data*, Tulsa World, October 22, 2001 at A1.

²⁵⁰ *Id.*

²⁵¹ The watchdog group OMB Watch has been posting information on its website concerning material pulled from the Internet by government agencies since September 11, 2001. For a current update, see <http://www.ombwatch.org/article>. (Last visited 1 July 2002).

water, "recalled" the product, asking recipients to return it.²⁵² EPA opted to remove all remaining RMP data from its website.²⁵³ Right-to-know supporters were quick to criticize the removal. In a hearing before the House Subcommittee on Water Resources and the Environment, Jeremiah Baumann of the U.S. Public Interest Research group reminded congressmen that "the right-to-know is a proven tool for increasing public safety,"²⁵⁴ and asserted that "removing this information from public view does nothing to reduce the hazard."²⁵⁵ In urging the committee to focus their attention on reducing risk, rather than restricting information, Baumann pointed out that nearly 5000 facilities in the U.S. store more hazardous chemicals than was released in the 1984 Bhopal accident.²⁵⁶

²⁵² Associated Press, *Public Records Tougher to View Since Sept. 11*, May 9, 2002. Available at <http://www.freedomforum.org> (last visited June 5, 2002). This website points out that many state governments also quickly moved to limit access to government documents. For example: Florida blocked public access to blueprints of government buildings and information on pharmaceutical supply stockpiles; Idaho blocked access to documents on certain public facilities; Louisiana blocked public access to information collected in terrorist investigations and vulnerability assessments of public facilities; Washington amended the state's open-records law to deny access to vulnerability assessment plans.

²⁵³ Merideth Preston, *EPA Pulls Accident Data From Web Site, Permits Access to Worst-Case Scenarios*, 32 Env. Rep. Curr. Dev 1978 (BNA) October 12, 2001. The TRI database, also accessible on the EPA website, was not pulled and remains available. EPA also removed its Automated Resource for Chemical Hazard Incident Evaluation Database and, on April 1, 2002, discontinued "Direct Connect" access to its Envirofacts database. The latter remains available only to EPA employees, EPA contractors, military, federal government and state agency employees.

²⁵⁴ TESTIMONY OF JEREMIAH D. BAUMANN BEFORE THE HOUSE OF REPRESENTATIVES COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON WATER RESOURCES AND THE ENVIRONMENT, November 8, 2001 (2001 WL 26187661).

²⁵⁵ *Id.*

²⁵⁶ *Id.*

The same day, Elaine Stanley, director of EPA's Office of Information, explained EPA's position to the same congressional committee:

EPA has developed four criteria for assessing the sensitivity of our information resources: 'type,' 'specificity,' 'connectivity,' and the 'availability' of information. Information on a facility's or a pollutant's location, chemical identification, volume, acute effects, and plant processes and management falls within the 'type' criterion. The 'specificity' criterion builds on the type of information and assesses the level of detail available for each type. The 'connectivity' criterion looks at the degree to which individual pieces of information can be connected to create realistic scenarios. Finally, the 'availability' criterion assesses the level of control that EPA has over releasing the information. This criterion ascertains whether or not EPA is the sole provider of a particular piece of information. If information is widely available through other sources outside of EPA's control -- such as information available from State or local government agencies, public interest groups, in textbooks or from universities -- then EPA's removal may not substantially alter its availability.²⁵⁷

Subsequently, Republican Representative Butch Otter of Idaho made a statement claiming he did not see a way to avoid putting much of the EPA information on the Internet "unless you're going to suspend our First Amendment, like we did with the Fourth, Fifth, Sixth, and Tenth Amendments in our terrorist bill."²⁵⁸ Other groups

²⁵⁷ TESTIMONY OF ELAINE STANLEY BEFORE THE HOUSE OF REPRESENTATIVES COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE SUBCOMMITTEE ON WATER, RESOURCES AND THE ENVIRONMENT, November 8, 2001 (2001 WL 26187659).

²⁵⁸ John Heilprin, *EPA Strikes Balance Between Information, Security: Terrorist Attacks Raise Issues About Accessibility to Data On Chemical Plants*, Charleston Gazette, November 9, 2001 at 7C. Presumably Representative Otter was referring to the recently passed "USA PATRIOT ACT" (PL 107-56) a bill rushed through Congress in October, 2001. This new law has caused several groups to raise civil liberty-related and other concerns. See, e.g. "Antiterrorism Bill Could Impact Nonprofits" at

applauded the removal. A spokesperson for the Henry L. Stimson Center argued EPA should “make the bad guys work for it [chemical hazard information].”²⁵⁹ Gary E. Warren, spokesman for the International Association of Fire Chiefs, expressed his organization’s concerns, saying “Why on earth we would...turn around and provide that information to any interested party, who is anonymous and untraceable, is beyond me.”²⁶⁰

Strong feelings regarding RMP information were not, however, restricted to the issue of Internet access. Federal reading rooms came under renewed criticism after the terrorist attacks when EPA chose to leave them open. No changes were made to access rules and no information was removed from the rooms,²⁶¹ despite requests from the chemical industry to restrict access.²⁶² On October 3, 2001, the president and CEO of the American Chemistry Council (ACC)²⁶³ wrote to EPA Administrator Whitman, urging the EPA to “take immediate action to temporarily prevent access to off-site consequence analysis data.”²⁶⁴ The ACC requested that the agency temporarily withdraw public

<http://www.ombwatch.org/npadv/2001/usapatriot.htm>. (last visited January 17, 2002), and Elizabeth A. Palmer, *Terrorism Bill’s Sparse Paper Trail May Cause Legal Vulnerabilities*, 59 Cong. Q. 2501, 2533, October 27, 2001.

²⁵⁹ *Id.* (Quoting Amy E. Smithson, chemical and biological weapons analyst).

²⁶⁰ *Id.*

²⁶¹ *Supra*, note 253.

²⁶² Merideth Preston, *Chemical Industry Urges Restriction on Access to Worst-Case Scenario Data*, 32 Env. Rep. Curr. Dev. 1978 (BNA) October 12, 2001.

²⁶³ The Chemical Manufacturer’s Association changed its name to the American Chemistry Council in 2001.

²⁶⁴ *Supra*, note 262.

access to all data in risk management plans in EPA's possession.²⁶⁵ EPA declined to take such a drastic move, citing sufficient security surrounding the reading room material.²⁶⁶ The agency did pledge, however, to remain flexible on any decision making "at this delicate time," and re-evaluate its policy as new information (such as intelligence information) became available to it.²⁶⁷ As of May 28, 2002 the reading rooms remain open and access rules remain the same.²⁶⁸

Another source of post-September 11 controversy is the decision by some non-government websites to make RMP data available on their websites. This information, obtained from EPA prior to the terrorist attacks, is the exact information that was previously available on the government site.²⁶⁹ Ironically, even after pulling RMP information from its site, EPA kept in place a hyperlink leading directly to the Right-To-Know network (RTK), an organization that continues to post RMP data.²⁷⁰ Despite criticism from industry and law enforcement groups, RTK provides executive summaries of RMP data from every state.²⁷¹ Activists maintain that despite potential risks, "the

²⁶⁵ *Id.*

²⁶⁶ *Id.*

²⁶⁷ *Id.* (Quoting EPA spokesperson Leo Kay).

²⁶⁸ EPA FEDERAL READING ROOMS, *available at* <http://www.epa.gov/ceppo/readingroom.htm> (last visited May 28, 2002).

²⁶⁹ Erin Hallissy and Charlie Goodyear, *Industries' Disaster-Plan Blueprints Still Available on Net: Some Fear Information Could Be a Guide For Terrorist Attacks*, The San Francisco Chronicle, October 25, 2001, at A8.

²⁷⁰ See <http://www.rtk.org>. (Last visited June 26, 2002).

²⁷¹ *Id.*

public deserves to know how refineries and chemical plants are prepared for potential disasters and what hazardous materials they are storing at their sites.”²⁷² In responding to a newspaper report on this situation, the ACC maintained that “times have changed” since September 11, and the “public’s right-to-know may have to suffer.”²⁷³ In a public statement, ACC asserted its belief that the “public’s right to know needs to be carefully balanced with the public’s right to be secure.”²⁷⁴ While the industry group continued its attempt to focus the debate on information release, a spokesperson for the group Communities for a Better Environment attempted to shift the argument to prevention in saying “[I]f industry and the government wanted to deal with [terrorist attack] they would follow recommendations that have been made by safety experts and activists alike – eliminate these chemicals or reduce the amount of them on site.”²⁷⁵ The spokesperson also expressed his organization’s belief that posting of plans on the Internet has not been shown to be a credible threat.²⁷⁶ In making these statements, the group alluded to what activists have been accusing the chemical industry of for years in the right-to-know

²⁷² Hallissy & Goodyear, *supra*, note 269.

²⁷³ *Id.*

²⁷⁴ American Chemistry Council, *Statement on the Public’s Right to Know*, November, 2002. (Posted on the ACC website, <http://www.americanchemistry.com>. Last visited May 28, 2002.) This statement explains how the chemical industry supports the concept of the public right to know and has “worked closely” with government in designing and implementing numerous right-to-know requirements. The statements also cites the opinion of anonymous experts that “removing sensitive information is essential for the safety of our citizens and can be taken without any long-term consequences.

²⁷⁵ Hallissy & Goodyear, *supra* note 269.

²⁷⁶ *Id.*

arena: that industry's true concern is not attack or accident. Activist groups contend that industry's main concerns are protection of proprietary information and public relations.²⁷⁷

Whatever the true agendas of the opposing factions, the fact remains that RMP data is currently unavailable from official sources, contrary to the system created by the August 4, 2000 final rule.²⁷⁸ This state of affairs has led to a request from Congress for a GAO study of potential security problems at chemical plants and a review of post-September 11 EPA decisions on RMP access.²⁷⁹ House Energy and Commerce Committee Chairman Billy Tauzin (R-La.) asked GAO to assess the EPA decision to remove RMP data from its website.²⁸⁰ The Congressman referred to CSISSFRRA's framework for the "secure management and distribution of certain [RMP] information"²⁸¹ and requested a GAO description of any changes to the management and distribution of the information since September 11.²⁸² The GAO expects to complete its study by late summer of 2002.²⁸³

²⁷⁷ See, e.g. Gary Bass, *A Post-September 11 Attack on Right-to-Know*, OMB Watch, October 12, 2001; *Public Still At Risk of Chemical Plant Attack*, OMB Watch, March 18, 2002. Both Articles available at <http://www.ombwatch.org>.

²⁷⁸ *Supra*, note 182.

²⁷⁹ *GAO Plans Study of Plant Security*. 261 Chem. Mark. Rep. 11 (BNA), April 1, 2002.

²⁸⁰ *Id.*

²⁸¹ *Id.*

²⁸² *Id.*

²⁸³ *Id.*

III. The Current State of the Law Regarding Release or Withholding of Environmental Information

A. Administrative Policy in Transition

As previously discussed, the federal government clearly has the authority, and as to some portions, a duty, to release RMP data to the general public. The statute itself mandates that RMPs "shall be available to the public under section 7414(c) of this title."²⁸⁴ In its final rule on section 112(r), EPA announced that RMPs would be made available to the public unless other laws or regulations prevented release.²⁸⁵ Congress curtailed this full release policy by passing the CSISSFRRRA²⁸⁶ which, along with its implementing regulations, limits release of RMP data on the Internet to the executive summary portion. Entire RMPs are available under restricted conditions at federal reading rooms across the country.

Could the government, however, totally curtail the release of RMP data? While the answer seems to be an easy "no," such a cursory glance may be too simplistic. EPA has succeeded in withholding all offsite consequence analysis data, including RMP executive summaries, from its website for almost ten months.²⁸⁷ While the federal reading rooms remain open, it is questionable whether, for example, a reading room in

²⁸⁴ 42 U.S.C. 7412(r)(7)(B)(iii).

²⁸⁵ Accidental Release Prevention Requirements: Risk Management Programs Under §112(r)(7), 40 C.F. R. §68 (1996).

²⁸⁶ Pub. L. 106-40, discussed *supra*.

²⁸⁷ See EPA's website at <http://www.epa.gov/ceppo/rmp> which states "[I]n light of the September 11 events, EPA has temporarily removed RMP*Info data from its website." (last visited July 2, 2002).

downtown New Orleans is actually available to a concerned "member of the public" in rural upstate Louisiana. Additionally, the CSSISFRRRA only mandates that regulations be promulgated to allow access by any member of the public to OCA information on a "limited number" of stationary sources without any geographical restrictions²⁸⁸ and other public access to OCA information "as appropriate."²⁸⁹ The current reading room limitation that allows members of the public access to up to ten RMPs regardless of geographic location and access to an unlimited number of RMPs on stationary sources located where the person lives or works is simply a function of rulemaking. In the current terrorism-conscious environment, it would not be unthinkable for a new round of rulemaking that would severely reduce this limitation.

Non-OCA RMP information that is not subject to CSSISFRRRA and a variety of other environmental data collected by EPA would be more easily withheld from the public. One article recently pointed out that at least four FOIA exemptions provide arguments for non-release of such data.²⁹⁰ The first is Exemption 1,²⁹¹ which exempts classified information from release if the information is classified pursuant to an Executive Order.²⁹² The current Executive Order, signed by President Clinton, certainly includes categories of information broad enough to encompass "homeland security" data.

²⁸⁸ CAA §112(r)(7)(H)(ii)(I)(aa).

²⁸⁹ CAA §112(r)(7)(H)(ii)(I)(bb).

²⁹⁰ Gidiere and Forrester, *Balancing Homeland Security and Freedom of Information*, *supra* note 7.

²⁹¹ 5 U.S.C. 552(b)(1).

²⁹² The order currently in place is E.O. 12,958. 3 C.F.R. 333 (1996).

Section 1.5 of the E.O. authorizes classification of information that concerns scientific, technological, or economic matters relating to the national security²⁹³ if release of such information "reasonably could be expected to result in damage to the national security" and that damage is described by the classifying agency.²⁹⁴ While the Clinton Executive Order has been seen as a reaction to the perceived excessive secrecy of the Cold War period, loosening control and speeding the declassification of information,²⁹⁵ it is unlikely this trend will continue in light of the Administration's reactions to the terrorist attacks. For example, President Bush has recently expanded the number of agency heads authorized to classify information as secret. On December 10, 2001, pursuant to E.O. 12,958, the President granted the Secretary of Health and Human Services the authority to do so.²⁹⁶ More recently, on May 6, 2002, President Bush granted the same authority to the Administrator of the EPA.²⁹⁷

²⁹³ *Id* at §1.5

²⁹⁴ *Id* at §1.2(a)(4).

²⁹⁵ See Gidiere & Forrester, *supra* note 7, pointing out that in the preamble of E.O. 12,958 President Clinton expressed his desire to loosen control of government-held information, saying:

Our democratic principles require that the American people be informed of the activities of their Government...Nevertheless, throughout our history, the national interest has required that certain information be maintained in confidence in order to protect our citizens, our democratic institutions, and our participation within the community of nations...In recent years, however, dramatic changes have altered, although not eliminated, the national security threats that we confront. These changes provide a greater opportunity to emphasize our commitment to open Government.

The second exemption currently available to the government for withholding environmental data is FOIA Exemption 2.²⁹⁸ The so-called "High 2" category exempts a document from release if it is "predominantly internal" and if disclosure of the document "significantly risks circumvention of agency regulations or statutes."²⁹⁹ While this exemption routinely protects such material as police investigation guidelines and confidential source information, it could arguably be used to exempt information seen as vital to protecting homeland security. Under the exemption, whether there is a public interest in disclosure of information is legally irrelevant.³⁰⁰ The concern is that a FOIA disclosure not "benefit those attempting to violate the law and avoid detection."³⁰¹ Therefore, the exemption "fundamentally rests upon a determination of foreseeable harm."³⁰² The Department of Justice's Office of Information and Privacy has, in the months since the terrorist attacks, encouraged agencies to "be sure to avail themselves of the full measure of Exemption 2's protection for their critical infrastructure information as they continue to gather more of it, and assess its heightened sensitivity, in the wake of

²⁹⁶ 66 Fed. Reg. 64,345 (2001).

²⁹⁷ 67 Fed. Reg. 31,109 (2002).

²⁹⁸ 5 U.S.C. §552(b)(2).

²⁹⁹ *Crooker v. ATF*, 670 F. 2d 1051 (D.C. Cir. 1981).

³⁰⁰ FOIA Guide, *supra* note 76 at 118. (Referencing a number of cases, including *Voinche v. FBI*, 940 F. Supp. 323, 328 (D.D.C. 1996) *aff'd per curiam*, No. 96-5304, 1997 U.S. App. LEXIS 19089 (D.C. Cir. June 19, 1997); *Institute for Policy Studies v. Department of the Air Force*, 676 F. Supp. 3,5 (D.D.C. 1987)).

³⁰¹ *Crooker*, *supra* note 299 at 1054.

³⁰² FOIA Guide, *supra* note 76 at 119.

the September 11 terrorist attacks."³⁰³ Another issue to be considered under Exemption 2 is the question of whether environmental information submitted by industry to EPA (or any other agency) is protected by the exemption. The answer hinges on whether such private data would become "predominantly internal" and thus protected once internalized by the agency. At least one author argues that focusing the "predominantly internal" inquiry on the use to which the agency puts the information rather than its original source would protect the information from release.³⁰⁴ In assessing the previously mentioned statement from DOJ's Office of Information and Privacy,³⁰⁵ the author points out that DOJ clearly favors the Exemption 2 approach to withholding private information submitted to the government, although it does not directly endorse this practice, presumably anticipating upcoming legal challenges.³⁰⁶

Exemption 3 of the FOIA³⁰⁷ allows withholding of information that is prohibited from disclosure by another statute, but only if the statute in question "(A) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or (B) establishes particular criteria for withholding or refers to particular types of

³⁰³ UNITED STATES DEPARTMENT OF JUSTICE, OFFICE OF INFORMATION POLICY, NEW ATTORNEY GENERAL FOIA MEMORANDUM ISSUED, posted October 15, 2001, at <http://www.usdoj.gov/oip/foiapost/2001foiapost19.htm>. (last visited July 2, 2002).

³⁰⁴ Gidiere & Foster, *supra* note 292 at 143. *See also Cox v. DOJ*, 601 F.2d 1 (D.C. Cir. 1979).

³⁰⁵ *Supra* note 305.

³⁰⁶ *Id.*

³⁰⁷ 5 U.S.C. §552(b)(3).

matters to be withheld.”³⁰⁸ This exemption could become critically important in the coming months and years, depending on which, if any, of the legislation currently pending in Congress, is passed into law. This legislation will be discussed in the next section.

Exemption 4 of the FOIA³⁰⁹ offers a final method for withholding environmental information from release. This exemption protects “trade secrets and commercial or financial information obtained from a person [that is] privileged or confidential.”³¹⁰ The most litigated element of this exemption is whether or not information submitted to an agency is “confidential.”³¹¹ The seminal case defining this term is *National Parks & Conservation Ass’n v. Morton*,³¹² which held that the test for confidentiality was an objective one,³¹³ and an agency’s promise that information would not be released was not considered dispositive.³¹⁴ Rather, the D.C. Circuit pronounced a two-part test for confidentiality that should be read to protect both government and private interests.³¹⁵ The court held that information should be considered confidential “if disclosure is likely

³⁰⁸ *Id.*

³⁰⁹ 5 U.S.C. §552(b)(4).

³¹⁰ *Id.*

³¹¹ FOIA Guide *supra* note 76 at 168.

³¹² 498 F.2d. 765 (D.C. Cir 1974).

³¹³ *Id.* at 766.

³¹⁴ See *Washington Post Co. v HHS*, 690 F.2d 252,268 (D.C. Cir. 1982).

³¹⁵ 498 F.2d. at 767.

to either (1) impair the Government's ability to obtain necessary information in the future; or (2) cause substantial harm to the competitive position of the person from whom the information was obtained."³¹⁶ This standard withstood a severe test in 1992 when the D.C. Circuit decided *Critical Mass Energy Project v. NRC*.³¹⁷ It survived, but was confined to cases in which a FOIA request is made for "financial or commercial information a person was obliged to furnish the Government."³¹⁸ For data that is voluntarily submitted to the government, the new test established by the D.C. Circuit is that such information is now categorically protected from release provided it is not "customarily" disclosed to the public by the submitter.³¹⁹ The importance of this distinction will become more apparent in the following section.

Since the terrorist attacks, the Bush Administration's reaction has been to withhold information requested under the FOIA, reversing the Clinton Administration's trend toward release. On October 12, 2001, Attorney General Ashcroft issued a FOIA policy memorandum³²⁰ that superseded Attorney General Reno's policy memorandum of

³¹⁶ *Id.* at 770.

³¹⁷ 975 F.2d. 871 (D.C. Cir. 1992).

³¹⁸ *Id.* at 880.

³¹⁹ *Id.* at 879. Exemption 4 has also been litigated extensively in the field of government procurement. The issue in controversy is often the release or withholding of bid information. Whether or not an agency must disclose unit price information has been an especially contentious subject area with the trend being toward restricting information. See, e.g. *McDonnell Douglas Corporation v. National Aeronautics and Space Administration*, 180 F. 3d. 303, 336 U.S. App. D.C. 368 (1999).

³²⁰ Attorney General's Memorandum for Heads of Departments and Agencies regarding the Freedom of Information Act (October 12, 2001), available at <http://www.usdoj.gov/oip/foiapost/2001foiapost19.htm>.

October 4, 1993.³²¹ While Attorney General Ashcroft announced the Administration's commitment to full compliance with the FOIA, he stressed that it was equally committed to "protecting other fundamental values that are held by our society. Among them are safeguarding our national security, enhancing the effectiveness of our law enforcement agencies, protecting sensitive business information, and, not least, preserving personal privacy."³²² He urged agency and department heads to consider the protection of these values when making FOIA disclosure determinations. He then reversed the Clinton Administration's liberal "foreseeable harm" policy and established a new "sound legal basis" standard governing DOJ's decisions on whether to defend agency decisions to withhold information.³²³ The Attorney General explained the meaning of the new policy as follows: "[w]hen you carefully consider FOIA requests and decide to withhold records, in whole or in part, you can be assured that the Department of Justice will defend your decisions unless they lack a sound legal basis or present an unwarranted risk of adverse impact on the ability of other agencies to protect other important records."³²⁴ In interpreting this memorandum, the Director of the Department of Defense Directorate for Freedom of Information and Security Review stated that under the new policy

³²¹ Attorney General's Memorandum for Heads of Departments and Agencies regarding the Freedom of Information Act (October 4, 1993), *reprinted in FOIA Update*, Vol.XIV, No. 3, at 4-5.

³²² *Supra* note 320.

³²³ *Id.*

³²⁴ *Id.*

“discretionary disclosures are no longer encouraged.” (emphasis in original).³²⁵ He also stated that DoD components could consider use of the “high 2” exemption to deny release of information that “may be of use to terrorist organizations”³²⁶ if they are prepared to present a sound legal basis in support of their determinations.³²⁷

Actions by the administration to restrict access to information are not limited to the FOIA. In a March 19, 2002 memorandum, Assistant to the President/Chief of Staff Andrew Card ordered department and agency heads to undergo a review of how the government safeguards information regarding weapons of mass destruction and “other information that could be misused to harm the security of our nation and the safety of our

³²⁵ Directorate for Freedom of Information and Security Review Director’s Memorandum regarding DoD Guidance on Attorney General Freedom of Information Act Memorandum (November 19, 2001). (Discretionary disclosures had been encouraged under the previous administration’s policy. See Attorney General Reno’s policy memorandum, *supra* note 321). The Deputy Judge Advocate General of the U.S. Air Force followed up the DoD memorandum in an on-line message to the Air Force Judge Advocate General’s Department, further explaining this discretionary disclosures issue:

The Attorney General reversed the previous policy of encouraging ‘discretionary disclosures’ of exempt records or information whenever disclosure would not ‘foreseeably harm’ an interest protected by a FOIA exemption. In short, the Attorney General’s policy now requires greater scrutiny of discretionary releases. Specifically, we must not make a discretionary release until we have carefully considered all of the institutional, commercial, and personal privacy interests that could be affected by disclosure of the information.

MESSAGE FROM DJAG: NEW FOIA POLICIES FOR NEW TIMES (January 9, 2002), (on file with author).

³²⁶ *Id.* The meaning of this phrase is not further developed or explained in the memorandum.

³²⁷ *Id.*

people.”³²⁸ The term “other information” is not defined in the memorandum. A follow-up memorandum prepared at Mr. Card’s request by the Information Security Oversight Office provides additional guidance.³²⁹ This guidance, in addition to reminding agencies to closely review their classified, reclassified, and declassified information seems to create a new category of “sensitive but unclassified” for “sensitive information related to America’s homeland security that might not meet one or more of the standards of classification.”³³⁰ The memorandum urges departments and agencies to process requests for such information in accordance with the Attorney General’s FOIA policy and, perhaps most significantly, suggests that information voluntarily submitted to the government from the private sector “may readily fall within the protection of Exemption 4 of the FOIA.”³³¹ The watchdog group OMB Watch, in its response to these memos, characterized these memos as “part of a larger mosaic that represents a huge shift from

³²⁸ Assistant to the President/Chief of Staff’s Memorandum regarding Action to Safeguard Information Regarding Weapons of Mass Destruction and Other Sensitive Documents Related to Homeland Security (March 19, 2002), available at <http://www.usdoj.gov/oip/foiapost/2002foiapost10.htm>.

³²⁹ Acting Director of the Information Security Oversight Office regarding Safeguarding Information Regarding Weapons of Mass Destruction and Other Sensitive Records Related to Homeland Security (March 19, 2002), available at <http://www.usdoj.gov/oip/foiapost/2002foiapost10.htm>.

³³⁰ *Id.*

³³¹ *Id.*

policies premised on the belief that the public has a right-to-know to one based on need-to-know.”³³²

B. Pending Legislation

In addition to the Administration’s new way of looking at the issue, no less than four bills are currently under consideration in the U.S. Congress that could affect the way environmental information is handled in this country. Unfortunately, the primary focus of most of the legislation (relevant to this article) is on whether or not to release information to the public rather than how to prevent chemical accidents or improve security at industrial sites. The highest profile legislative initiative by far is the President’s own Homeland Security Bill.³³³ This highly ambitious initiative would set up a new Department of Homeland Security comprised of an estimated 170,000 employees.³³⁴ Less noticeable in §204 of the bill is the following sentence: “[I]nformation provided voluntarily by non-Federal entities or individuals that relates to infrastructure vulnerabilities or other vulnerabilities to terrorism and is or has been in the possession of the Department shall not be subject to §552 of title 5, United States

³³² OMB WATCH, WHITEHOUSE MEMO ORDERS REVIEW OF INFORMATION PROCEDURES (March 1, 2002), available at <http://www.ombwatch.org/article/articleprint/658/-1/108/>.

³³³ H.R. 5005, 107th Congress, 2d. Sess. 2002.

³³⁴ *Homeland Security: Bush Sends Congress Bill to Create New Department With Broad Powers*, 77 Federal Contracts (BNA) 754 (2002).

Code.”³³⁵ Perhaps not coincidentally, the Critical Infrastructure Information Security Act of 2001,³³⁶ currently under Senate consideration, incorporates similar language in proposing to exempt voluntarily-disclosed critical infrastructure information from the FOIA. A variety of groups strongly oppose such language, fearing “data dumping”³³⁷ by industry to shield companies from civil lawsuits and from accountability for their actions.³³⁸

A third bill, the Community Protection from Chemical Terrorism Act,³³⁹ seeks to protect environmental information, specifically RMP data, in an even more drastic manner. This bill would amend the Clean Air Act to “limit access to off-site consequence analysis information in order to reduce the risk of criminal releases from stationary sources, and for other purposes.”³⁴⁰ No member of the public would be allowed access to any RMP data with the exception of “read only access to a paper copy

³³⁵ *Supra*, note 333 at §204. Incidentally, the bill, in §732 would authorize the department to invoke 40 U.S.C. 474 “to avoid the application of any procurement statute or regulation that would impair the accomplishment of the Department’s mission.”

³³⁶ S. 1456, 107th Congress, 1st Sess. (2001).

³³⁷ See Dan Caterinicchia, *Sharing Seen as Critical for Security*, Federal Computer Week (Online Ed. May 9, 2002) quoting John Malcom, deputy assistant attorney general, US DOJ Criminal Division: “[A]s it’s [Critical Infrastructure Security Information Act] written now, the law would tie the government’s hands by precluding it from taking civil enforcement action against a company by direct use of information obtained through critical infrastructure needs. That loophole would enable a company that was knowingly at fault to do a document dump on the government and basically absolve itself of future civil prosecution.”

³³⁸ See, e.g. Letter from Laura W. Murphy, Director, American Civil Liberties Union Washington Office, to Sen. Joseph Lieberman and Sen. Fred Thompson, April 3, 2002 (available at <http://www.aclu.org/congress/1040302b.html>).

³³⁹ S. 2579, 107th Congress, 2d Sess. (2002).

³⁴⁰ *Id.* (Introduction).

of off-site consequence analysis information *that does not disclose the identity or location of any facility or any information from which the identity or location of any facility could be deduced.*"³⁴¹

One bill currently under consideration attacks the problem of reducing chemical risks, rather than controlling information flow. The Chemical Security Act of 2001³⁴² addresses the safety of chemical facilities and processes by identifying high-priority facilities based on chemical risk, imposes a general duty upon facility owners and operators to identify hazards and minimize release consequences, and provides for public availability of records and information.³⁴³

³⁴¹ *Id.* (Amending the CAA by striking and replacing the existing §112(r)(7)(H)). (emphasis added).

³⁴² S. 1602, 107th Congress, 1st Sess. (2001).

³⁴³ *Id.* The Senate summary of the Bill explains the provisions in more detail:

Directs the Administrator of the Environmental Protection Agency to promulgate regulations to: (1) designate certain combinations of chemical sources and substances of concern as high priority categories based on the severity of the threat posed by an accidental or criminal release of such substance; and (2) require each owner and operator of a high priority category chemical source to take specified actions to prevent, control, and minimize the potential consequences of such a release.

Declares that each such owner and operator has a general duty to: (1) identify hazards that may result from an accidental or criminal release; (2) ensure safer design and maintenance of that source; and (3) minimize the consequences of any such release.

Grants authority to the Administrator or the Attorney General to: (1) secure necessary relief to abate imminent and substantial endangerments to the public health or

C. Section Summary

With the exception of certain materials for which release to the public is mandatory (e.g. CSSIFRRA-covered RMP data), authority unquestionably exists to either release or withhold most environmental information from the public. The most readily available justification for withholding of information is found in the four FOIA exemptions discussed above. How these four exemptions are interpreted and used is mainly a function of administrative policy. The practice of the Bush Administration has been to use the exemptions to justify withholding, reversing the Clinton Administration's policy of liberal discretionary disclosure. Legislation currently pending in Congress, with one exception, would continue this non-disclosure approach. The justification for withholding environmental information, for the most part, continues to be the presumption that disclosure "provides a blueprint that terrorists may use to plan and carry out terrorist attacks."³⁴⁴

welfare or the environment because of a potential release or to issue orders necessary to protect the public; (2) require persons believed to have information relating to a potential release, or persons subject to any Act requirement, to establish and maintain records, make reports, and provide information; and (3) enter the premises and have access to records and required information of such an owner or operator.

Provides for: (1) public availability of records and information obtained, with exceptions for national security and trade secrets; and (2) civil and criminal penalties.

Senate summary of S. 1602. Available at <http://thomas.loc.gov> (last visited July 3, 2002).

³⁴⁴ S. 2579, *supra* note 338 at §2.

IV. The Real World

A. Do Terrorists Care if RMP Data is Posted on the Internet?

The argument that releasing environmental information on the Internet somehow makes the terrorists' job easier³⁴⁵ or provides a roadmap for terrorists³⁴⁶ seems to be based on our culture's insistence that terrorist organizations are an unsophisticated lot preying on easy targets of opportunity.³⁴⁷ The attacks of September 11 should have exposed the fallacy of this stereotype, opening our eyes to the reality of the situation: certain terrorist groups are sophisticated, dedicated, well funded organizations. The long-term planning, training, and funding for a four-pronged simultaneous attack that was apparently totally unanticipated³⁴⁸ by the most advanced country in the world illustrates the capabilities of just one of those groups.

In using the argument of "not making things easier for terrorists"³⁴⁹ to justify withholding chemical hazard information from the public, proponents fail to heed the lessons of September 11. Not posting this information on the Internet simply forces a

³⁴⁵ *Supra* note 5.

³⁴⁶ *Supra* note 10.

³⁴⁷ See, e.g. Washington Post Online "Nation at War" archives for a wide variety of news stories and opinion pieces illustrating this point. Available at <http://www.washingtonpost.com>. (Last visited, July 9, 2002).

³⁴⁸ See Dan Eggan and Dana Priest, *Bush Aides Seek to Contain Furor: Sept. 11 Not Envisioned, Rice Says*, Washington Post, May 17, 2002 at A1; Juliet Eilperin and Dana Priest, *We Should Have Known, Goss Says of 9/11*, Washington Post, June 12, 2002, at A12.

³⁴⁹ See introductory articles, *supra* notes 5, 6, 10.

would-be terrorist to spend a few extra minutes on the computer researching available “target” data that would otherwise be conveniently assembled by the EPA. This extra few minutes is certainly insignificant compared to the amount of time terrorist organizations have already demonstrated they are willing to spend on planning their attacks.³⁵⁰

By way of illustration, this author conducted a practical demonstration in acquiring data on potential chemical targets. Avoiding any EPA-affiliated information (including RMP data formerly posted on the EPA website),³⁵¹ the author searched a variety of publicly available websites in an effort to locate as much information as possible to recreate the data used by affected facilities to calculate offsite consequences.³⁵² The search initially commenced by selecting a few major cities and perusing on-line telephone directories for wastewater treatment plants³⁵³ and chemical facilities. This method quickly revealed the names and locations of the largest sewage treatment facilities in Chicago, Illinois and St. Paul, Minnesota. Community websites then revealed a good deal about the capacity of the plants³⁵⁴ (including size of the plants

³⁵⁰ See, e.g. James Bamford, *Too Much, Not Enough*, Washington Post, June 2, 2002, at B1; Juliet Eilperin and Dana Priest, *Plot Likely Hatched in '98, Tenet Says*, Washington Post, June 19, 2002, at A10.

³⁵¹ RMP data can still be found on a variety of non-government affiliated websites.

³⁵² It should be noted that the author is probably significantly less sophisticated in the area of chemistry, physics, and engineering than an individual selected by a terrorist organization to research the same data on the organization's behalf.

³⁵³ Wastewater treatment plants often use chlorine gas as part of the treatment process.

³⁵⁴ Ironically, the fact that the Stickney Sewage Treatment Plant is the largest such facility serving metropolitan Chicago was noted in a 5th grade class project posted on the

relative to other sewage treatment plants across the country), chemicals used, number of people living in the area, and bodies of water into which the plants discharge. Simple searches in this area³⁵⁵ also revealed a posting on the "AOL Hometown" page dedicated to the topic of sewage treatment facilities.³⁵⁶ This page listed a large number of sewage treatment plants (with links to the websites of many) categorized both alphabetically and by treatment processes used.³⁵⁷

Next, attention was turned to the subject of chemical facilities. Acquiring potential targeting data in this area turned out to be much easier than in the previous category, due to the publications and websites of the various trade organizations.³⁵⁸ An initial search³⁵⁹ pointed to the website of the Formosa Plastics Corporation.³⁶⁰ The site lists the company's production facilities (Delaware City, DE, Illiopolis, IL, Baton Rouge,

Internet, revealing that elementary school students apparently possess the rudimentary skills necessary for this type of research. This posting opened the door to a variety of other pertinent information posted on the Metropolitan Water Reclamation District's website.

³⁵⁵ Search conducted on <http://www.google.com>.

³⁵⁶ <http://www.hometown.aol.com/erickschiff/minicip.htm> (last visited July 2, 2002).

³⁵⁷ Some of the links provided quite detailed information on the various facilities. For example, a link leading to the Lynn Wastewater Treatment Plant in Lynn, Massachusetts, provided both pictures and a technical diagram.

³⁵⁸ As noted in the 16 December 2001 issue of the Washington Post, chemical industry trade publications were found in Al Qaida hideouts in Afghanistan – not RMP data. See James Grimaldi and Guy Gugliotta, *Chemical Plants Feared as Targets*, Washington Post, December 16, 2001, at A1.

³⁵⁹ Again on www.google.com

³⁶⁰ <http://www.fpcusa.com>. (last visited July 2, 2002).

LA, and Point Comfort, TX), and provides information on the production capacities of each site. (millions of pounds per year of Chlor-Alkali products and other plastics-related compounds). A production flowchart included on the website explains in simple terms the flow of energy and raw materials involved in the manufacture of specific products.³⁶¹ More helpful than the websites of individual companies, however, were the websites maintained by the various industry groups, especially the American Chemistry Council (ACC)³⁶² and the Chlorine Chemistry Council.³⁶³ The ACC website boasts that it is a “community oriented website with website sections for each of the approximately 1700 ACC member manufacturing facilities.”³⁶⁴ Better than its word, the website includes links to even non-ACC member industrial facilities. A search engine enables the viewer to locate industrial facilities either by location or chemical product. Using the ACC website, four locations were selected as potential targets. Two were large collocated chemical production facilities in Torrance, California (adjacent to Los Angeles), one was the largest facility on the east coast for regenerating spent sulfuric acid, and the fourth a major east coast sulfuric acid/oleum production facility. Although the quantity of information varied slightly between the websites, generally the information available included production capacity, raw materials used, number and size of storage tanks,

³⁶¹ The site also provides information on the company’s 2.5 billion pound per year polyvinyl chloride operations. The company claims a 2.2 billion pound per year chlor-alkali production capacity for use in chemical processing, soap and detergent, water treatment, pulp and paper, and aluminum.

³⁶² <http://www.americanchemistry.com> (last visited July 2, 2002).

³⁶³ <http://www.c3.org> (last visited July 2, 2002).

³⁶⁴ ACC website, *supra* note 362.

transportation methods used to ferry raw material and finished product to and from the facilities, material safety data sheets explaining the chemical characteristics and potential harmful effects of the various raw materials³⁶⁵, technical data sheets regarding processes and finished products, and street addresses of the facilities.³⁶⁶ With these addresses as a starting point, other data needed for completing an offsite consequence analysis was easily obtained from public and commercial Internet locations. This data included population density in the surrounding area, climatological information, and detailed topologic maps. One website, in addition to street maps of any scale, provided aerial photographs of the selected address.³⁶⁷ The photographs, which clearly show chemical storage facilities at the plants in detail, are dated "2002."³⁶⁸ Total time for the entire data gathering process was less than two hours.

After collecting this data, a rough offsite consequence analysis was calculated using the guidance found in EPA's Risk Management Program Guidance for Offsite

³⁶⁵ Detailed technical information regarding the harmful effects of chemicals and chemical compounds are also widely available in print. *See, e.g.* RICHARD J. LEWIS, SR., HAZARDOUS CHEMICALS DESK REFERENCE, 3RD ED. (1993); MARSHALL SITTIG, HANDBOOK OF TOXIC & HAZARDOUS CHEMICALS AND CARCINOGENS, 3RD ED. (1991).

³⁶⁶ One facility helpfully provided driving directions to the plant from Los Angeles International Airport.

³⁶⁷ <http://www.mapquest.com> (last visited July 2, 2002). Maps and aerial photographs can be printed, downloaded, saved, or "e-mailed to a friend." The true 21st century terrorist also has the option of downloading maps to his personal digital assistant.

³⁶⁸ *Id.*

Consequence Analysis.³⁶⁹ Although other methods of computing offsite consequence are widely available,³⁷⁰ this publication was used in order to approximate the results acceptable for submission to EPA for later comparison purposes. After calculating OCA results for the four chemical plants and two sewage treatment plants (total time needed for each calculation was approximately 30 minutes) the author visited the EPA reading room in Washington D.C. and requested to see the official RMP submissions.³⁷¹ In comparing official RMP submissions to self-calculated analysis, results on endpoints and affected populations for the chemical facilities were substantially similar, although the industry calculations of affected populations tended to be somewhat lower.³⁷² Comparisons with the sewage treatment plants were less similar because less information tended to be publicly available on the amount of chlorine used and stored at the facilities.

This brief study was not intended to statistically compare the degree of accuracy obtained using publicly available information to official RMP data. It was simply designed to explore the question of whether reasonably accurate targeting data is

³⁶⁹ U.S. EPA, RISK MANAGEMENT PROGRAM GUIDANCE FOR OFFSITE CONSEQUENCE ANALYSIS (1999)(EPA 550-B-99-009) [Hereinafter OCA Guidance Document].

³⁷⁰ EPA, in its OCA Guidance Document recommends its publicly available "RMP*Comp" computer program to perform calculations necessary for OCA, but notes that other computer modes, both public and proprietary, are available. In Appendix A-1, the guidance document lists a variety of technical references for calculating consequence analysis.

³⁷¹ Results on file with author. Last visit July 8, 2002.

³⁷² Population density used in calculations varied somewhat from official RMP data, presumably because the official data was based on the 1990 census. The 2000 census data was available at the time of this calculation.

obtainable through means other than government-provided environmental information. The answer is a disturbing yes. A wealth of information was found to be easily obtainable on publicly available websites. The most useful data was provided by the chemical facilities themselves on websites designed to promote their own companies and products. Enough data was collected during the course of one afternoon to plan devastating attacks on major population centers in three locations on both coasts of the United States.

B. Refocusing the Debate: Assessing Chemical Safety Risks

1. Moving to the Next Level

The purpose of the preceding section was to illustrate in simple form the proposition that the debate over whether the United States provides public access to chemical safety information is immaterial. Any criminal or terrorist organization with minimal computer skills and familiarity with internet search engines can calculate at least a rough estimate of a planned chemical attack's impact. Even without a computer, telephone books, newspapers, and trade journals could be effectively used as planning tools. Unless our society is ready to completely suspend several amendments to the U.S. Constitution, we must assume that those planning attacks on chemical facilities have the research tools they need for adequate targeting. If we also heed other lessons of September 11 and acknowledge that terrorist organizations have the will and the resources to commit to long-term, meticulous planning and preparation, the debate can be moved to the next level: how do we best protect against attacks on chemical facilities and/or minimize the consequences of such attacks once they occur?

2. Addressing the Real Problem

This stage of the debate will be contentious and solutions will be costly. The fact that chemical facility security needs to be addressed is acknowledged by factions on all sides of the issue. The extent of the problem and appropriate solutions are more contentious. For example, in 1999 the Agency for Toxic Substances and Disease Registry completed a report on chemical terrorism.³⁷³ After developing a procedure to assist local public health and safety officials in “analyzing, mitigating and preventing”³⁷⁴ chemical terrorist threats, the agency applied its criteria to two communities: “a large city in a desert with chemical and entertainment industries, and a county containing several major chemical manufacturing facilities located along a river valley.”³⁷⁵ The report found:

Although routine security measures at government buildings and abortion clinics were excellent, security at chemical plants ranged from fair to very poor. Most security gaps were the result of complacency and lack of awareness of the threat...Chemical plant security managers were very pessimistic about their ability to deter sabotage by employees, yet none of them had implemented simple background checks for key employees such as chemical process operators. None of the corporate security staff had been trained to identify combinations of common chemicals at their facilities that could be used as improvised explosives and incendiaries...Security around chemical transportation assets ranged from poor to non-existent. Chemical barge terminals were located along the

³⁷³ Agency for Toxic Substances and Disease Registry, *Industrial Chemicals and Terrorism: Human Health Threat Analysis, Mitigation and Prevention* (1999). Available at <http://www.mapcruzin.com/scruztri/docs/cep1118992.htm> (last visited June 4, 2002).

³⁷⁴ *Id.*

³⁷⁵ *Id.*

banks of the chemical plants, and were freely accessible along the river side of the facility. Rail and truck assets had no security beyond staging areas. Rail cars containing cyanide compounds, flammable liquid pesticides, liquefied petroleum gases, chlorine, acids, and butadiene were parked alongside residential areas.³⁷⁶

Although several key Democratic lawmakers in September, 2001 referred to the study as “the best information currently available about the vulnerability of chemical plants,”³⁷⁷ the ACC argued the study was limited in scope and lacked peer review.³⁷⁸ The industry group urged all parties to withhold judgment on the issue of chemical plant security until a more comprehensive study under development by the DOJ is released.³⁷⁹ That study, originally due to Congress August 2000, has been delayed, prompting the Natural Resources Defense Council to file a lawsuit against DOJ. The Bush Administration recently notified Congress that funding problems will delay completion of the project beyond the new August, 2002 deadline.³⁸⁰

Some members of Congress have attempted to focus on the issue of security rather than information disclosure as well. House Energy and Commerce Committee Chairman Billy Tauzin (R-La.) has asked the GAO to review “security-related actions

³⁷⁶ *Id.*

³⁷⁷ *Chemical Makers Blast Study on Industrial Vulnerabilities to Terrorism*, XVIII Environmental Policy Alert 22, (October 31, 2001) (Available at <http://www.insideepa.com>).

³⁷⁸ *Id.*

³⁷⁹ *Id.*

³⁸⁰ *Public Still At Risk of Chemical Plant Attack*, *supra* note 277.

taken by the chemical industry since the September 11 terrorist attacks and assess the industry's voluntary initiatives for further strengthening the safety of its facilities."³⁸¹ A separate Congressional request, from Representative John Dingell (D-Mich.) will be addressed in the same GAO review.³⁸² Rep. Dingell inquired as to whether current regulations are adequate to protect against terrorist attacks and respond to chemical industry vulnerabilities.³⁸³ As mentioned previously, the study is expected to be completed by late summer. The Chemical Security Act,³⁸⁴ currently under consideration by the Senate, recognizes the need to move beyond the information release issue and pushes EPA, DOJ, and industry to the logical next step beyond the RMP program: prevention, technological innovation, and minimization of consequences.³⁸⁵

Many activist groups, not surprisingly, believe that the debate over how to best prevent communities from chemical attacks should focus on issues like hazard assessment, process and storage procedure changes, and security measures. They generally believe that a fully-informed public is necessary to achieve such goals. One of the groups that has been most vocal about shifting the debate away from the information-release issue and toward prevention is Greenpeace USA. In the recent past the group has

³⁸¹ *GAO Plans Study of Plant Security*, *supra* note 281.

³⁸² *Id.*

³⁸³ *Id.* Rep. Dingell further asked the GAO to "[P]lease examine what federal regulatory authorities exist, if any, to require vulnerability assessments and require that necessary corrective actions be taken to address significant vulnerabilities in advance of potential terrorist attacks or other threats from intentional attacks."

³⁸⁴ *Supra*, note 344.

³⁸⁵ *Id.*

used RMP data to produce and distribute reports on the dangers presented by Louisiana vinyl and petrochemical factories and on three Dow Chemical plants³⁸⁶. The group plans to soon release a color map showing how a terrorist attack on the Kuehne Chemical Company bleach plant in New Jersey could release a cloud of lethal chlorine gas over New York City.³⁸⁷ Greenpeace has faced serious criticism for these actions, as have other groups who participate in similar actions, but the groups generally justify their actions by claiming they're preparing endangered communities for the worst, or forcing chemical facilities to change their products and practices.³⁸⁸

The chemical industry has made some progress in the area of site security, although most of its energy still tends to be focused on protection of its information.³⁸⁹ The ACC, which had been using a published guideline for plant security, adopted a mandatory Security Code of Management Practices in June, 2002. Four of the more notable management practices prescribed by the code are threat-vulnerability-

³⁸⁶ Davis *supra* note 5. The Dow Chemical worst case scenarios showed 330,000 people at risk in Michigan, 105,000 in Texas, and 155,000 in West Virginia.

³⁸⁷ *Id.* Greenpeace plans to follow up this report by creating a directory of the 123 plants in the U.S. that could each threaten 1,000,000 people or more.

³⁸⁸ *Id.* A spokesman for the Right-to-Know network illustrated this point in saying "[Y]ou could hide the information, but the threat is still there." *Id.* A coalition of right-to-know activists, in assembling "The Safe Hometowns Guide" on the Internet urged readers to use the posted information to pressure companies to change their manufacturing, switch to just-in-time delivery of materials to reduce storage of toxic materials, and create buffer zones around their plants. *Id.*

³⁸⁹ For example, the chemical industry has lobbied aggressively against the Chemical Security Act of 2001, arguing that voluntary efforts are sufficient. *Chemical Plants Fail to Cut Hazards as Concerns of Terrorism Grow*, OMB Watch, January 16, 2002. Available at <http://www.ombwatch.org>.

consequence analysis, implementation of security measures, training, and communications-dialogue-information exchange.³⁹⁰ To assist in analyzing threats, most ACC members will use a new DOJ-commissioned tool developed by Sandia National Laboratories.³⁹¹ However, ACC member companies represent less than ten percent of all RMP facilities.³⁹²

Meaningful reduction in the risks presented by chemical facilities is possible. Washington D.C.'s experience with the Blue Plains Wastewater Treatment Plant is just one example of a success story. In late 2001 the plant was able to change its practice of using chlorine gas in its processing to a method that uses sodium hypochlorite and sodium bisulfite, far less hazardous compounds.³⁹³ That a process change occurred is, of course, good news. The unfortunate part of the transformation is that twenty years elapsed between problem identification and process change.³⁹⁴ Changes resulting from programs like the RMP can be seen on a local scale across the country. For example, in

³⁹⁰ The listed management practice of information exchange acknowledges that "communication is a key element to improving security." The code can be found at <http://www.americanchemistry.com> (last visited July 5, 2002).

³⁹¹ *Id.*

³⁹² *DOJ Expected to Call For Increased Security at RMP Facilities; Chemical Makers to Use New Tool to Assess Security Gaps*, U.S. Newswire, May 24, 2002 (2002 WL 4577895).

³⁹³ Whitman *supra* note 6 at 31. As early as 1982 a study projected that if one of the 90-ton chlorine rail cars at the plant discharged, a lethal chlorine gas cloud could extend as far as three miles away. *Id.* For more information on the Blue Plains conversion, see Grimaldi & Gugliotta, *supra* note 358; Jay Landers, *Safeguarding Water Utilities*, 72 Civil Engineering 6, June 1, 2002.

³⁹⁴ *Id.*

2001 the Pittsburgh Post-Gazette reported on the effects of the RMP program in Allegheny County.³⁹⁵ Officials reported that as a result of the program the county wastewater treatment plant changed from liquid to solid chlorine and approximately 50-60 companies reduced their on-site chemical storage or discontinued use of listed hazardous chemicals.³⁹⁶ Time will tell whether owners and operators of other chemical facilities will move toward meaningful reduction of chemical risks on their own, through legislative or grass-roots pressure, or not at all.

V. Conclusion: Full Disclosure of Chemical Hazards is Essential to National Security

By refusing to waste time and resources debating the red herring issue of public access to information, policymakers, industry, communities, and individuals can focus on truly strengthening national security through addressing the risks that chemical facilities pose to our communities. The first step in this process is to ensure that all parties have access to complete, accurate information regarding the potential terrorist targets in their communities, and across the nation. Planning on the strategic and tactical levels can only be effectively undertaken by informed policymakers with input from law enforcement, the intelligence community, the military, emergency response personnel, industry, public interest groups and concerned citizens. Government contractors have the opportunity to take the lead on this issue if they are able to change the corporate mindset of resisting

³⁹⁵ Don Hopey, *21 Facilities in County Report Storing Harmful Chemicals*, Pittsburgh Post-Gazette, May 28, 2001, at A24.

³⁹⁶ *Id.*

disclosure and embrace the possibilities of greater protection of corporate assets,³⁹⁷
reduced liability, and increased federal spending on security.³⁹⁸

The history of conflict in both our distant and recent past teaches us that accurate information on the battlefield leads to adequate preparation, creating better vision through the fog of war. Without adequate information and preparation, our country was blinded to the imminent attacks on Pearl Harbor, the World Trade Center, and the Pentagon. Intelligence information delivered by Paul Revere allowed the American forces to be ready when the British arrived. Information delivered via cellular phone to the passengers of Flight 93 enabled them to prepare a plan of attack and sacrifice themselves to save countless others on the ground.

We are at a crossroads in this country concerning how to best protect ourselves from the danger of terrorist attacks against chemical facilities. The road that restricts access to information leads us to a destination where the public is blissfully unaware of the dangers surrounding them while terrorists carefully research targets for maximum potential impact. The other road allows an informed public to prepare for potential attacks, plan responses, and put pressure on industry to change practices and processes in a meaningful way, thus reducing the likelihood of attacks. While military secrets are

³⁹⁷ One only needs to look at the situation the airline industry found itself in after the terrorist attacks to appreciate the long-term corporate consequences of an attack on a particular industry.

³⁹⁸ See Steven T. Goldberg and Courtney McGrath, *Target: Terrorism*, Kiplinger's Personal Finance, August 2002, at 30. "America's vulnerability to terrorism is the impetus behind a growing obsession with security. Government agencies and businesses are spending billions to reduce the chances of another September 11-type attack and to minimize the damage if one occurs."

essential in time of war, the targeting potential of chemical facilities in this country is no secret to our enemy. We cannot afford to let ourselves fall into the trap of believing that terrorist groups are ignorant "crazies" who can only effectively choose targets if they are presented with a "Terrorism for Dummies" handbook³⁹⁹ They have already proven otherwise. We must ensure that our citizens are not at a disadvantage to the enemy.

Therefore I say: 'Know the enemy and know yourself; in a hundred battles you will never be in peril...If ignorant both of your enemy and of yourself, you are certain in every battle to be in peril.'

Sun Tzu⁴⁰⁰

³⁹⁹ *Supra*, note 10.

⁴⁰⁰ *Supra* note 2 at 84.